THE FUNDAMENTALS OF VEDANTA PHILOSOPHY

SWĀMI PRATYAGĀTMĀNANDA SARASWATĪ

GANESH & CO. (MADRAS) PRIVATE LTD.
1961

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SWAMI PRATYAGATMANANDA SARASWATI

THE FUNDAMENTALS OF VEDANTA PHILOSOPHY

(A REALISTIC APPROACH)

BY

SWAMI PRATYAGATMANANDA SARASWATI

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ऊर्ध्वशुण्डमधःशुण्डं द्विधा व्यावृत्तशुण्डकम् ।
सर्गविसर्गसंधीशं नौम्योङ्कारविनायकम् ॥



The mystic figure of Vināyaka or Gaṇeśa is a living symbol or image of Oṁkāra. Gaṇeśa wears the head of an elephant and as such the trunk occupies a prominent position in the figure. This holds a deep significance. In the variously inspired images of Oṁkāra, the trunk is found depicted in three different and distinct postures: sometimes it is up-raised, sometimes it hangs downwards in the natural manner and again it is shown in the middle as a double trunk in which the ends are curled up and down. The first symbolises the movement of creation or evolution; the second that of dissolution or involution; and the third, the neutral nexus or the ground of equipoise between the two.

As we engage ourselves in the chanting of Oṁkāra we must reverentially bow to Vināyaka as the Lord presiding over the three basic functions of creation, dissolution and harmony, which the vibrations of Oṁkāra (A, U, M) also signify.

[From *Japasūtram*, Pt. IV.]

PREFACE TO THE SECOND EDITION

These lectures on The Fundamentals of Vedānta Philosophy were delivered more than thirty years ago, and they are now republished almost in the same form as regards both its contents and arrangement. The title of the book has, however, been changed in order to remove a possible misunderstanding as to the scope and manner of the treatment of the subject in the book, and to indicate more clearly that the book aims at dealing with the foundations rather than with the superstructure of Vedānta Philosophy, and that its plan and line of treatment have been radical realism rather than "idealism" in the ordinary orthodox sense.

Even as regards the foundations, excavations were tried where in such cases they are commonly not expected to be. They were not tried in such high, unstable altitudes as the transcendental conceptions of Brahman, Māyā, Dvaita, Advaita and so forth, but in what one might safely take as the *terra firma* of one's own actual whole of Experience or "Fact". Explore the Fact, and you explore Reality: Know thyself, and Brahman is known. So our work begins at the level of the Given or the concrete whole of Experience. Although Fact is Experience accepted in its concrete, seamless entireness, the term "Fact" was preferred because the other term might possibly suggest a dissection of live existence into a subjective half and an objective, thought and thing, which both are abstractions. Fact is above such division and abstraction. If Logic is unable to carry on without categories or relations of some kind or other, it should be plainly recognised that Fact is alogical. It is also neutral with respect to both Thing and Thought, Objective and Subjective. Fact

again, is Absolute. Relations emerge as relations when Fact "reviews itself" as Fact-sections: when Bhānam becomes Bhāsah.

It is called Fact because of its fundamental self-evidence and self-assurance. Here I may quote a few lines from an earlier work—*Patent Wonder* (1915):

> Fact, the concrete whole of experience, is assurance itself. The fact that it is given cannot possibly be questioned, though I may have all sorts of misgivings about what I pragmatically call its objective validity. Leave all reference to anything beyond itself, take it as the given actual, and you cannot possibly doubt it: for to doubt it is to contradict yourself, to refuse to be what you actually are. Perhaps you ought to be something else than what you are, and if you choose to regard that 'ought' your real, you may actually be now what you really are not. But then this distinction between 'actually' and 'really' is a pragmatic one—one that you have chosen to believe in and abide by. . . . The belief in the possible, the foretaste of the possible, the remembrance of the possible, are sections of the actual itself. . . . The magic circle of the given actual can never be transgressed. . . . I cannot therefore cast the Actual itself into any frame of 'out-door' dimensions. Any such play with the Actual is 'in-door' or immanent. . . .

In a still earlier work—*Approaches to Truth* (1914), the Problem of Fact had been studied with a measure of sustained effort of contemplative analysis and the outlines of a system, or what we might call a "Theory of Fact", were sought to be evolved. And those outlines bore or seemed to bear an aspect (if not also a character) of what one might, with a shrug of mingled mystification and vexation, call "proto-metaphysical".

We may quote a few lines also from this latter work with a view to showing how the Given Whole or Fact must be intuited and lived, as distinguished from how it is to be understood and judged. With respect to the latter, the method of measure and the rule of relation do apply, *i.e.*, both

mathematics and logic: otherwise, there will be no meaning for us in what has been given or immediately served, and no use for us as we are used to accept it.

When I am looking at a patch of cloud, my object is undoubtedly an extended something and extension is an aspect of my experience; but do I actually discriminate this aspect as a separate term or element of thought? While undoubtedly experiencing Space directly, do I explicitly make either a logical subject or object of Space? No . . . Again, where is Time in the perception of the cloud? We must distinguish between the Fact as actually *lived* and as actual *living* from Fact as thought and discourse. In the former the thought of Time is in abeyance; it is waiting aside in ambush perhaps . . . the Given is not yet woven into a temporal scheme. . . . Even felt Time is not the same as the Time of thought and discourse. . . . A flood of genial sun-shine has burst forth upon Nature, and my cloud is now swimming on the celestial flood like an angel on wings regarding with silent awe and rapture the Creator's masterpiece—the Earth! Now, where is Time in this enchanting episode? The episode no doubt happens in Time, and in reviewing and reproducing the fact I have no doubt dealt in tenses also; but in the warm living experience as it comes and lasts, am I not completely immersed—is not my whole being taken up by the scene before me—am I the seer, not the scene itself for that moment of intuitive absorption?

The same remarks will apply to the relation of Subject and Object. For example, it is the dissecting and reviewing Fact and not Fact itself that looks upon a given experience as "mine". From the latter's point of view (if one be permitted to think of a point of view in the alogical neutral) it will be more appropriate to speak of the "I" or the "me" of a given experience. It is Experience that possesses "me" and projects "me" as a centre of reference, as an "origin" with respect to which the dimensions of Space-Time and all the co-ordinates of thinking and acting have to be instituted and exhibited.

In this earlier work the nature of the Fact (with a capital F) was studied with a care that sought to bring down

high metaphysics from the region of the "transcendental nebulæ" and make it assume, so far as possible, the features and proportions of basic mathematical analysis. Fact is dumb no doubt, but is not "brute" or "blind" like the "matter" of Kant. It is *Mahāmaunam*, but is the Light of light (*Jyotiṣām Jyotiḥ*). It is Self-Evidence. Thought and all discourse, without covering it, are laid upon this foundation and derive their urge and evidence from this. Also their End and Interest, because the Fact is not only *Sat*, it is also *Cit* and *Ānandam*. The later work would, accordingly, call it *Patent Wonder*—that is, a Wonder not veiled and hidden *in itself*. It is *Bhānam Aparokṣam*. It is *Āścaryam*, nevertheless, as the Upaniṣads have it: the Absolutely Manifest Wonder.

In the analysis of the Fact such "important" (as, for instance, Bernard Bosanquet thought in his review of the first book in *The Mind*) distinctions were worked out as Fact and Fact-section, Reviewing Fact, Judging Fact, Fact-operation, and so on. In a subsequent work—*The World as Power* (in two vols.), which we wrote in collaboration with Sir John Woodroffe, this fundamental position of the Fact Theory (if one might say so without contradiction in terms) was sought to be further scrutinised and consolidated. The concept of Śakti or Power not only made no fundamental difference but it rather invested the Fact (if possible) with even fuller and richer wholeness and reality (*Pūrṇatvam*). What was implied in the first presentation of the Fact became explicit in this later. Pure Cit exhibited the fullness of its perfection as Cit Śakti. Brahman, so to say, "consummated" itself as Brahmamayī Mahāmāyā. And the transcendental equation of Advaita became an absolute identity (*Dvaitādvaita-vivarjitam*).

In a very recent work—*Japasūtram* (in six vols.)—the entire ground has been re-traversed and re-prospected. It is an original work in Sanskrit though it has been fashioned

after the model of the Brahma-Sūtras, and comprises over five hundred Sūtras and more than two thousand Kārikas—explanatory verses—each one followed by an elaborate commentary (in Bengali). A resumé of this work, in English, has been published recently under the same title *Japasūtram* by Messrs. Ganesh & Co. In the context of the work now being re-published, reference may be made particularly to the Sūtras—Mahāmāyā and Māyā in the third vol. of *Japasūtram*, and also to the definitions and Bhānam and Bhāsah and, especially to Marsha-pañchakam and Bhāsa-pañchakam.

Reference is made to these previous and subsequent works in order to bring out in stronger and clearer relief the basic background of the Vedānta Philosophy as prospected in these Fellowship Lectures, and prepare the reader for a better understanding of the approach attempted therein—which is called fundamental Realism. Many portions of the book would now seem to require an uptodate revision and a contemporaneous elucidation. But we have preferred to leave the old "classic" structure practically un-manipulated.

Our thanks are due to Messrs. Ganesh & Co. for undertaking this arduous work of republication, which, however, for them is a labour of genuine love, devotion and service.

Thanks are due also to Śrī M. P. Pandit, an accomplished scholar and deep *sādhaka*, for reading the proofs.

SWAMI PRATYAGATMANANDA SARASWATI

Calcutta
September, 1961

PREFACE TO THE FIRST EDITION

This course of twelve Lectures are the *Sreegopal Basu Mallik Fellowship Lectures*, Calcutta University, for 1927. These Lectures were prepared on the basis of the oral public Lectures that had been delivered in the University. Summaries of the main points dealt with in the oral Lectures are, as published in the columns of the newspaper, *The Bengalee*, given in Appendices.[1] These may be read as offering a commentary on many points not enlarged upon in the body of the written Lectures.

These Lectures deal with the Vedānta Philosophy in what I believe to be its fundamentals; and my method of treating the subject—it will be found that I have not trodden the beaten track in every respect—has been determined partly by the theme as defined by the University (which required me to indicate the place of Vedāntism in the economy of modern Western Thought, and, to estimate its *value*); and partly by the fact that in these Lectures I have confined myself to stating, as far as possible in current scientific-philosophical terms, what I conceive to be the essential and general features of the Vedāntic doctrine. From that statement it will, I hope, appear that I do not believe Vedāntism to possess an historical and geographical interest merely, but that I regard it as *homo-typal*, possessing a living and abiding human value. I have called the present volume " Introduction to Vedānta Philosophy "; but this, whilst indicating that

[1] Published in the present edition (1961) as " Summary " at the end of the book.

the subject herein introduced requires to be further pursued and elaborated, does not promise quite an easy reading for one who is only a beginner in this special discipline. Still, a careful student will, as he proceeds, find (as I hope) nearly every technicality and obscurity that he meets on the way as clearly explained as the scope and limits of the present essay permit.

As I was unavoidably absent from town while the book was going through the press, and could not read the proofs, some errors have crept into the body of the book as well as in the Footnotes. Most errors will, however, be readily perceived as such, and the correct forms will as readily suggest themselves. The Index, though not an exhaustive one, may be found to be useful.

I wish to thank my friends Prof. Nripendranath De, M.A., Sj. Nripendranath Mitra, Sj. Sarat Chandra Ghosh, M.A., and Sj. Purnashashi Basu, B.Sc. for the great pains they have taken in seeing the book through the press.

Ananda-niketana
NAIHATI-SIRAMPUR
Khulna, Bengal
12th August, 1928

PRAMATHANATHA MUKHOPADHYAYA

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I

THE LEADING ISSUE

HUMAN Thought has kept no register of its birth, and though the beginning of Philosophy has been variously traced to such emotions as curiosity, doubt and wonder,—and one may claim for such guesses at its genesis at least some degree of reasonableness—the beginning of thought itself is an event in the History of the World—if indeed it is an event—which has, it seems, still kept intact its seal of mystery, and bids fair to remain for long one of the undeciphered hieroglyphics of existence—to retain a place near the centre of the Riddle of the Universe and in a catalogue of those "Enigmas" about which our verdict is likely to be, "We do not know" though, possibly, the version of the Riddle as given yesterday by the biologist Haeckel may require to-day to be recast, and the catalogue of the "ignorabimuses" as given by the physicist E. du Bois Raymond in the eighties of the last century may demand modern qualification and revision.

The problem, as soon as one tries to approach it, resolves into several. Of these we may distinguish some: the anthropological one asking—when and under what circumstances did the primitive man first give unmistakable indications of his being a thinker? Can the beginnings of thought (which must be defined) be traced down to the anthropological roots of man as, for instance, Darwin attempted to do in his Descent of Man or Romanes in his Mental Evolution in the Animal and Man? Then the psychological one asking—when and

under what conditions, does the baby give hints that it has developed into a thinker? Then, the metaphysical one asking when and how, if at all, did thought evolve out of the general scheme of being? We shall have, as we proceed, to deal with these in some of their pertinent aspects. For the present we may narrow our problem down to this: Thinking appears to be an event like any other event; how and when does this event occur; and is thought competent to know its own occurrence? We shall not attempt directly to solve it now, but note some of the issues to which such attempt has led in philosophy.

The problem, mainly epistemological, may be judged as possible by some and impossible by others—and this will depend on the general attitude of the *thinker* towards the fact of life and existence. According to some it will appear that there is, *prima facie*, no inherent impossibility in Thought making an essay successfully to circumvent its own source or sources—to think out the origin and conditions of thought itself; it can just as lightly or otherwise proceed to discover the conditions in which the fact of thinking becomes possible, or for the matter of that, first became possible in the primitive *homo sapiens* for instance, as it can proceed to trace the origin of a particular species of fauna or flora in the "geological record" of the earth's strata.

One need not, it is thought, subscribe to Materialism to believe in the possibility of thought having an origin, or in that of thought thinking out its own origin. Thinking is just an event in a multitude of other events which constitute the universe that need not, however, be "matter" in the last analysis, and to these other events it may be related in time, in place, and in causality. There are events in our own organism in the first place, and in our environment in the next, which are, apparently, caused or occasioned by thought; on the other hand, thought itself is, no less apparently, caused

or occasioned by events in the environment and the body. The fact of thinking may, accordingly, be just one element in a vast tissue of events; so that, the mere fact that thought can judge and reason about other events (*e.g.* the fall of the apple or the incidence of a magnetic storm), whilst these other facts cannot, as it is commonly believed, judge and reason about themselves (the apple apparently not itself discovering gravity; or the well-known astronomical discrepancy of the motion of the perihelion of Mercury not itself proving Einstein's Relativity; the magnetic storm not itself observing, measuring and deducing from the solar spots or other causal data; and so on)—this fact *viz.* that thought is, apparently, the sole judge and thinker, while other events simply are without judging and reasoning about themselves, is no proof—so it may be supposed—that thought is so far a class by itself, *sui generis*, that it cannot be made to rub shoulders and elbows with the "brute", "blind", "unintelligent" events of the universe—that, in fine, it must not, in its essence at least, be drawn up into a line with the common herd of facts—that thinking as such, that is, as distinguished from its empirical forms, is not an event at all as events are understood, excluding, therefore, every possibility, in regard to *thinking as such*, of there being either an origin or an end, and of its philosophizing genuinely about that origin or end.

To materialism Thought commonly is, of course, an "epiphenomenon", a "bye-product", a sort of "effervescence", "phosphorescence", and so forth; and not only is it an event, but it is one that possesses the greatest face-value but the least actual credit in the "Stock-Exchange" of world's verities. Thought *thinks* that the world can be taken on, and in its own terms, that is, in terms of "impressions and ideas" and the laws of their association, and has sometimes fancied that the world is not there—the infinite realm of facts and laws is not there—when Thought is not there: but Materialism

and Realistic views of the world have generally seen in such thinking and fancying factitious fallacy and delusion.

The world *is* whether we think about it or not; and the world would certainly be poorer if in the skull of the *homo sapiens* certain motions and redistributions did not take place, and consequently or *pari passu*, thought-event did not occur; but still it would be a real, wonderful, colossal, though abysmally dark drama, from which one act only was left out. Correct or not, such views of things make thought one item in a vast system of events, which, therefore, is neither beyond the system, nor is what supplies the "matter" and "form" of the system.

Since the universe is believed to be a system in which there is correlation of the "points" and "events", whatever enters into the system must be a co-efficient determining other parts in it; and, therefore, it cannot make its exit stealthily from the system leaving the *status quo* undisturbed. If thought is an event in the world-manifold or universe, it is a member of the correlation-system, Stress-system, as we shall call it later; and it must be borne in mind that a member of such a system cannot be enlisted by a simple vote of "go in" or excluded by another of "go out". Its coming in and going out is not, apparently, a case of simple addition and subtraction. A limb of an organism cannot be severed from the whole without affecting the other limbs that remain, or for the matter of that, the organism itself that has been operated upon. Any "physical" system, gravitational or other, will also show this characteristic. If a lump of matter be imagined to be suddenly brought into existence or spirited out of existence, that phenomenon will not fail to affect the entire gravitational—and granting that all physical forces are correlated—the entire dynamic system of the physical universe.

And, for aught we know, the change or "disturbance" if we so call it, need not be confined to the bounds of the

so-called physical universe only; for, after all, the universe, the cosmic system, may be one, and the bounds that one commonly assigns between the physical and the spiritual, between the spiritual and the biological may be only practical, "pragmatic", and, to some extent, arbitrary bounds with nothing absolutely settled or sacrosanct about them. And we say this even if we entertain a suspicion as to the cosmos still containing in itself "interpolations", undigested elements of a pre-existing or co-existing chaos (and, in this connection the interesting Chinese story of Hu and Shu dividing between themselves the spoils of Chaos who was their host and entertained them rather too well may be recalled), so that the universe may not actually be a *perfectly* ordered whole, a logically consistent compact system, but may, in actuality, be a system that is either in a permanent state of war with an uncompromising principle of antithesis with no future hope of victory and peace, or else, is a system that is, like Hegel's Absolute—according to one school of interpretation (giving a system of impersonal Being perpetually in the throes of an evolution into a Perfect Personality or Self-Consciousness)—always "in the making", —"the far off divine event" to which the poet's intuition sees the whole creation move, being the ideal of a perfectly coherent, self-consistent universe. But whatever the universe actually now is—a perfectly ordered system or a partially ordered system—it *is* a system, to the constitution and behaviour of which the principles of mathematics and logic do, at least approximately and in the known and explored realms, apply. Whence it follows that the event of thought, as a member of the explored event system, can neither loosely adhere to nor slip away from—its entry and exit not affecting the *status quo* of—that system.

So much is perhaps admitted on all hands. If the materialist calls thought an epi-phenomenon, and asks us to believe

that its being there or not being there makes no "material" difference to the main world episode, we are not to take him to mean that what does not make a material difference to the main episode makes no difference at all—that the so-called epi-phenomenon is a non-entity or cypher which may be added to or subtracted from the "quantity" of natural fact without producing increment or decrement. Even in a chemical reaction which has set a model to the materialist's theorizing fancy ever since the time of Cārvāka and Democritus, a bye-product is, admittedly, as necessary a product as the "main product", and the physical conditions being in the given case what they are, we must have the "main" as well as the "bye"; and, conversely, the conditions are different, the chemical reaction is different, and the "main" product itself is different in a case where the "bye" is not there, or is something else.

It is admitted, therefore, that though the brain may secrete consciousness as the liver secretes the bile, this subtle secretion of thought is as good and genuine an event in the economy of the universal causal system as, for instance, the phosphorescent or "radio-active" light "secreted" by the glow-worm, or the radiations, visible or invisible, produced in a vacuum tube under appropriate electrical stress. Like these latter events, thought-secretion must be explained and not explained away; and the explanation must be adequate. I shall not, at this stage, speak of *fundamentum ultimum*—the so-called "matter"—of the materialist; but it already appears that the basis on which he laid his foundations has been shaking and shifting very much of late. Locke's distinction between the Primary and Secondary qualities—though disallowed by Berkeley—has for long been tacitly accepted as an hypothetical base of construction by generations of physicists; and, in scientific theory, the real world has for long consisted of atoms and their motions which are believed not to possess

the secondary qualities—colour, taste, smell, sound, and so forth. Mathematical theory has tended to adopt the view of Boscovich that the physical atom is "a geometrical point in space, a sizeless centre of force, having position, inertia and rigidity", or that of Wilhelm Ostwald that the atom of matter is a unit of energy, or that of Helmholtz-Kelvin that it is a vortex-ring in æther. Similar other theories have disputed the field, and it seems that the deductions of physical science have followed equally well, or almost so, from rival theories about the constitution of the substance of the physical universe. Recently, Relativity physics has pushed the physics of Galileo and Newton to the realm of approximation: pre-relativity formulæ of physical science (*e.g.* those relating to gravity etc.) have now been proved to be but approximately correct. In the words of Bertrand Russell, "Newtonian Physics was but a first rough sketch of Nature". True; but it seems hardly likely that even the New Physics of Lorentz, Minkowski, Einstein and others has finished the final sketch, though one may advance a *prima facie* claim for it that it has already *begun* it.

The Electron Theory of matter has itself tended to "dematerialize" matter; for, matter is thereby reduced to electric charge, or, as some of the protagonists of Æther would prefer to put it, to Æther and stresses in it; and this electrical charge or this Æther, though docile and submissive enough to mathematical formulæ and equations, is scarcely "matter" in the sense matter has commonly been conceived. As Sir Oliver Lodge said long ago in his Romanes Lecture (1903): "The mass which is explicable electrically is to a considerable extent understood, but the mass which is mere material (whatever that may mean) is not understood at all. We know more about electricity than about matter". And he proceeded to add that it was to him very unlikely that the electron contains a material nucleus in addition to its charge. Experimental investigation as well

as speculation have moved considerably apace since then; and the Rutherford-Bohr atom, the Heisenberg atom, and so on, have now, it appears, made the physical unit instinct with a new meaning which lights up the prospect before Philosophy so far as to enable one to see with Bertrand Russell that the "problem has two parts: to assimilate the physical world to the world of perceptions, and to assimilate the world of perceptions to the physical world. Physics must be interpreted in a way which tends towards idealism, and perception in a way which tends towards materialism. I believe that matter is less material, and mind is less mental, than is commonly supposed,[1] and that, when this is realized, the difficulties raised by Berkeley (though, as the author adds, not some of the difficulties raised by Hume) largely disappear". One may agree further with Russell that the principles of physical interpretation which inspire the work of Dr. Whitehead (the doctor himself calls them "the principles of natural knowledge"), appear to be "essential to a right solution of the problem". In fine, the gulf between physics and philosophy, reality and perception, has existed in speculation, and the goal of modern interpretation is to show that the gulf simply does *not* exist.

It is another question how far modern interpretation as represented by the Relativity Theory, Mathematical Logic and other thought movements has actually advanced towards the goal, and in what respects, if any, the essentials of modern interpretation will have to be recast so that it may carry us nearer the goal; but barring these possibilities of readjustment —which no one perhaps, not even the staunchest supporter of mathematical logic, will care to veto—we may feel already that whatever the actual route to be followed may turn out to

[1] Cf. *Chāndogya Upaniṣad*, VI. 5, 6, 7, shewing not only that *Manas* (Mind) is dependent on *Annam* ("Food"), but is actually constituted by it. Cf. also *Bṛhadāraṇyaka Up*. II. 5. 3, making *manas—annam* of a subtle kind.

be, Physics has now definitely taken the right orientation, and, far off yet as the goal is, it is now in sight, and chances are very few that the steps of Nature-Philosophy will in future as easily and as often falter and go astray into the quicksands of materialism, nihilism, agnosticism, and so forth, as they did in the past.

It is true that that some of the pioneers in the field of Physical Philosophy (Karl Pearson, Mach, Poincare, and others for example) did not, under the influence of the then fashionable scientific creed of empiricism or sensationism, see what the later toilers in the field are just beginning to see. It is true also that traces of a mist, more or less dense, appear to be still hanging about the eye-brows of some of these later investigators themselves: while most of them have thrown up materialism, open or veiled, as their official article of faith, some have discarded idealism also and fought shy of parallelism or "double-facetism" lately so much in vogue, and are inclined to accept "a neutral stuff" as the fundamental being. Speculation in this realm, like investigation in the realms of the Quantum Theory and Electron Theory, is developing so rapidly that it is impossible to say exactly what form the solution of the problem of being will take tomorrow; but, nevertheless, so much seems assured that the ghost of "crude" materialism has been laid for good, and that matter and spirit must henceforth be linked up together by a common parentage which is certainly not material, but may be either spiritual or "neutral".[1] Philosophy is called upon to decide which.

I began with a query as to the origin of Thought, and this has ushered us into the inner court of classical philosophical controversy. The very cursory glance we have cast at the state of affairs there has sufficed to show us wherein all the

[1] Cf. the well-known verse of the *Ṛg-Veda* (I. 164. 46) speaking of the "One Reality": also *Bṛhadāraṇyaka Up.* (I. 3. 3) showing how the Primordial Being splits Itself into "man" and "wife", *patiṣca patnī cābhavatām.*

wranglers agree and wherein they differ as to the definite point that we have raised touching the origin of human thought. Clearly, this query resolves into four: *When* did thought originate? *How* did thought originate? *Why* did thought originate? And about *what* did thought originate? These questions pertain to the jurisdiction of general psychology and epistemology, and we need hardly go out of our way to deal with them. What we are directly concerned with is, to begin with, the admission made by all parties *viz.*—Thought or rather Thinking is an event correlated with other events which constitute our system of the universe; and since the correlation is admitted, it must be, as we have shown, further admitted that it is a co-efficient or constituent factor of that system, so that it cannot be omitted and yet the system left as it was *minus* the element subtracted. The plea for this admission is plain enough, and the surprise is not that it is generally admitted, but that it has sometimes been doubted and debated. What, indeed, can be plainer than this that *cogito* (I think) is a fact with as good or bad a title as any other of common occurrence, for instance, the fact that I stumble upon a stone and get hurt or the fact that a pebble flung by me hits an apple and makes it fall to the ground? What, again, can be more evident than this—given the universe of relations, the fact of thinking can no more be suspended than an admittedly "objective" or physical event which is *due* to follow upon its proper and adequate assemblage of conditions being there? And it would be a strange, uncanny surprise, surely, if what was due, from logical necessity, did not come, and the surprise would not be a whit less strong or uncanny if the event in question were a mental, "subjective" event instead of a physical, "objective" one like an eclipse of the sun or the moon due to happen on the strength of data adequately observed and correctly calculated.

The point of thinking being a correlated event in universe is a point that ought to be, I submit, beyond doubt; and if it has been doubted and disputed, it is because the issue has been allowed to be muddled by irrelevant, or, at least, wider considerations. The issue is *not* whether Thought (beginning with a capital letter) or Thinking as such is an event.[1] The Idealistic School, generally, will say—it is not. The Thought that thinks, judges and relates must stand aloof from the whole empirical show, and it was the constant theme of Green, Bradley and some other Idealists that relations between A and B, B and C, C and D can be constituted and known by a Principle which does not itself enter the tissue of relations: the Principle that not merely knows and thinks, but constitutes all relations—relations of contradiction being some of them—that subsumes and embraces all relations, and yet is not one of them or even their sum-total, has commonly been styled the Absolute, the Spiritual Principle in Knowledge and in Nature, and so forth.

And this unique and fundamental character has been claimed not only for the supreme Thinking Principle, but even (in a more or less qualified sense) for certain Forms and Laws of this Principle: one may instance the hierarchy of Plato's Ideas, Kant's Forms and Categories, and last but not the least, the Concepts of modern mathematical logic—though these last are thought by some of its best exponents to be of "neutral stuff"—that is, neither material nor ideal, but pertaining to the common basis of both. To this last view, we may passingly remark, there is hardly any cogency in the proof that would yield us a supreme Thinking Principle, "standing above" and yet constituting all relations; but it avers that the "logical manifold" of terms and propositions *generating*

[1] We shall later consider the meaning of *Sa aikṣata* or *Tadaikṣatā* —the "original" Thought out of which the world evolves in Vedānta.

by their activity or "agency" other terms and propositions rests upon absolutely sure foundations.

But needless to say doctors of other schools will differ from this, and have, as a matter of fact, differed. We have referred briefly to the materialist, but he is not there alone to oppose the claim of the Idealist or even that of the Neo-logician. The Neo-logician may call himself a realist, even a realist of the naive type, as Edwin Holt in his *Concept of Consciousness* does; but neo-logic and realism, new or old, are not co-extensive classes, and there are realists who may take up a position of critical impartiality in regard to what are and what are not thought-events, and who may refuse to budge from their positions under showers of shots from either flank—materialism or spiritualism, or even under the more formidable shower from the front now partly occupied by logico-mathematical philosophy.

Thinking is just one event in a universe of other events, mind or consciousness is a "thing" in a system of other things, and it is vain and futile to seek to derive one class by the other; just as colour is not sound, and *vice versa*, so thought is not the object of thought—*esse* is not *percepi* (to take the negation of the famous Berkeleyan dictum), and the question of the relative value of thing and thought, the object and the subject, is not of any ontological significance, whatever other significance it may possess. In other words, even admitting—though it need not be admitted—that the thinker and his thought are of a higher value than the thing and its changes, this mark of superior value—relative and pragmatic as it may be—is no evidence that the former constitute or belong to a more fundamental status of being from which the latter derive a delegated being and leased out efficiency. This indeed is one of the main planks of the idealistic position, but realism may refuse to admit that it rests upon any substantial props. Values cast upon the materialist's retina an inverted

image: the thing and its processes being, in his judgment, of more substantial and lasting value than the thinker and his thought. But even assuming that it is so, the realist will again refuse to deduce any ontological conclusion from premises stating merely what phenomena are of greater "value" than what others.

Now, it is this view of the realist that awakens confidence and evokes sympathy in the breast of the plain man—who sees a wondrous world around him of which he knows himself as a part, and his instinct teaches him to regard the world as much real as himself, and events in the world at least as real as thoughts and feelings in himself. He is haunted with no predilection for regarding, for instance, a patch of cloud ablaze in the sublime conflagration of the setting sun as wholly or largely an "idea" or a "complexus of sensations" in him; or for regarding a beautiful thought and an uplifting purpose in him as only a brain-secretion or even as a psychosis turning one facet of a fact of which the other is a neurosis. He bestows no thought also on the question whether the world around him and the consciousness in him may or may not mingle in their roots, and draw the sap of their substance from one parent Being; and if so, whether that Being is matter or mind or neutral stuff. The plain man suffers himself to be shaken by no such doubts and questionings; and Realism is a view of things which, while raising these doubts and questionings, claims to see sufficient grounds why they should be quieted as our peace-breakers and dispelled as our seducers rather than encouraged as our path-finders and trusted as our enlighteners. The Realist alone, therefore, can hold out assurance to the plain man that his instinct has not erred, that his commonsense is not necessarily common nonsense. The materialist—if he were a savant—could only tell him that his world of experience is real only as regards the abstract qualities of mass-inertia and motion, and that all else—all the

wealth of varied colour, taste, smell and sound in the world—do not exist outside his own skull; and the most astounding and dismaying revelation of all—that the only thing real, substantially and causally, inside his skull, is not his consciousness, but the cerebral matter in motion. This is a revelation which cuts violently across the grain of the easy, natural instinct of the plain man.[1]

Nor can it be claimed for Idealism, Parallelism or Neutralism that they open to the plain man a vista of thought and philosophy that is altogether reassuring—one that does not cramp, cripple or otherwise inconvenience his natural outlook, but rather accommodates his belief-instincts and thought-habits. Berkeley put the following words into the mouth of Philonous: "I am not for changing things into ideas, but rather ideas into things: since those immediate objects of perception, which according to you are only appearances of things, I take to be the real things themselves. . . . We both, therefore, agree in this: that we perceive only sensible forms; but herein we differ, you will have them to be empty appearances, I real beings. In short, you do not trust your senses, I do." All this is right; but still it does not allay the disquieting suspicion which Berkeley's analysis of matter, his theory of vision, his pulling down of the wall between primary and secondary qualities, and his transmutation of things into ideas in God's mind, if not of the subject's own, have raised in the plain understanding. And not only the plain, unsophisticated man, but the wary and subtle philosopher has refused to take Berkeley (in the person of his Philonous) at his own rating. For the plain man thing is not idea, nor is idea thing; and once Berkeley identified the one with the other, it soon became immaterial which is which, and the premise, by its own inexorable logic, led to the

[1] Vide *post* for a statement of the Vedānta view of perception which makes perceptions *presentations* and not *representations* of external objects.

conclusions which Hume, Kant, Fichte and others drew from it; and though, in the history of philosophy, the inexorable logic appears to have moved uncertainly and haltingly in some cases, it was bound to lead ultimately but to one conclusion—Subjectivism or Solipsism. And this the plain man dreads and shrinks from no less than from consciousness reduced to brain-secretion, and, along with it, the infinitely rich world of colour, smell, taste and music translated into neuron-movements inside the bony casement of the cerebral hemispheres.

The plain man is shaken out of his naive complacency by these theories of knowledge and experience; and though the plain position is not necessarily the right position—ignorance, doubt, error and illusion besetting it too often and too plainly—it cannot, I believe, be gainsaid that it is a position that is at once natural, healthy and useful; and we are by no means certain that in exchanging this for one of those commonly adopted by "high" Philosophy, one only loses what it is better to lose, and gains what it is essential to gain. The incidence of ignorance, error and so forth in the naive position is patent enough, and consequently there is need enough for criticism—for science assuring correctness and truth, and philosophy defining ends and appraising values. In fact, it is this weakness of the naive position out of which the necessity of a science of Evidence (*Pramāṇa*) is born; it is because naive experience is not necessarily and, in all cases, right experience (*Pramā*). Yet in righting the naive position one must be sufficiently on his guard that the righting of the crust or outer shell, however necessary, does not entail the sacrifice of the inner core or underlying substance of which that shell is but a cover and a vehicle. That the naive position is, and for countless ages has been, so practically useful to us "in the struggle for existence" at least, seems to be an argument in its favour that it is essentially a correct position in accord with

"the eternal verities and inherent fitness of things". Theories may come and go, and the side-walks of history are strewn with the wrecks of speculations that dropped down on the road and perished. But for millions of years—if with Sir Arthur Keith we can put back the antiquity of man so far as that—the plain man in his naive attitude has not only kept his place in the relentless, unsparing economy of Nature's hard facts, but has by slow and steady steps advanced to and occupied some of the vantage grounds; and this, *prima facie*, would not be possible if his attitude towards the verities and facts of existence were essentially a false, out-of-place-and-relation attitude.

The child and the savage have kept as near as possible to this normal, healthy and useful attitude towards the world of things, and "ideas" and theories have, generally, come between them and that world with one result, *viz.* that the child and savage have commonly been sophisticated into vacillating theorists and the world of things has been metamorphosed into elusive abstractions.

The strong and weak points—and the naive position has both—of the plain man as contrasted with those of the theorist—and he, too, has both—will appear as we go on with our enquiry; and the sequel will shew what may be right as regards essence and what may be wrong as regards accidents in the naive position and *vice versa*; and, along with it, what may be wrong as regards essence and what may be right as regards accidents in the position of the common theorist, and *vice versa*.

And it is to be remembered that the absolutely unsophisticated plain man does not actually exist. As the savage man of to-day is no true copy of the Primitive Man, so neither is the savage nor the child as we find him to-day a true representative of the plain man. The plain man seems to be an ideal to which the savage and the child are more or less close

approximations. The man in the street is perhaps a more distant approximation than the ancient hunter—the man in the bush. Man, in whatever state we now find him, is a mixture of the naive and the theorist: the pure, pristine metal can hardly be separated from the "alloy". On the other hand, the pure theorist does not exist also—never without a very strong dash of the naive. Commonly, a philosopher is a philosopher in his academy; in everyday life he is a plain man. The absolutely plain man and the absolutely wise man are, therefore, both concepts, ideals; and we are practically called upon to deal only with compromises. If we could define the concepts, we might possibly discover that any chasm did not yawn between the two—possibly the absolutely plain man was also the perfectly wise man. But such enigmas apart, let us begin, meanwhile, with the naive position as we actually find it; and in looking out for it, let us look out for the naivest position that we can find. And if we are sufficiently on our guard, that position need not necessarily be searched for outside ourselves: "Scratch the Russian and you will find the bear", they used to say;—so let us scratch ourselves, our natural thinking, bravely and vigorously, and we shall not fail to discover—beneath sundry accretions and encumbrances of culture and civilization—the naive man, even the naivest.

But the naivest man is, as we have said, no guarantor of the absolute correctness and adequacy of his position. There *is* need enough for criticism—analysis, adjustment and synthesis; in one word, for philosophy. The whole business of proof and proving, test and testing, arises out of this. But none the less the best—the most natural and healthy—starting-point for philosophy, as assuredly for life also, is the outlook of the plain man. Starting with this, the philosopher has to see in what way, and in what respects, that outlook requires to be cleared up, simplified, broadened, straightened and illumined.

2

Now, we may take it that in the universe of the plain man—who as we meet him has, no doubt, tasted the fruit of the forbidden tree, and is no longer plain in the pristine sense —the question we asked ourselves at the outset of the present lecture is not too " ethereal " to find a place. He has learnt to distinguish between thought and thing, though he is as yet innocent of idealism, materialism or neutralism, or any other " ism " for the matter of that. He sees an external event, say, an eclipse of the moon, and is curious to know the *why* of it; and he has some explanation of it that satisfies him, fantastic or otherwise. No doubt the fact or event of thinking or feeling he has learnt to distinguish; but it is late in the day that he turns his steps " homeward "—to the facts of consciousness itself. This has been " pre-arranged " by the author of our being as the *Kaṭha Upaniṣad* in one of its mystical passages [1] says. But whether this reflective attitude turned inward comes early or late in the day, it comes; and the plain man does not cease to be plain when it comes to him. There is no sin in reflection or even self-reflection; it is when reflection usurps the function of perception, self-consciousness poses as experience, that violence is done and disaster is courted.

What, then, is the universe of the plain man? In asking this, we are not asking about his notions or theories, if he has got any, relating to his universe. As the plain man lives in us also—it may be not in the drawing or sitting rooms of our conventional life— we may ask: what is *our* universe, apart from all notions we may have formed of it, and all theories we may have framed with reference to it? Theories have their use; but facts are infinitely more important. Now, the universe of the plain man is a *fact*.

Here we must essay, tentatively at least, to describe our plain man's universe. The most indubitable fact about every

[1] II. i. 1.

one of us is—Experience. By this I mean the totality of what is sensed, felt, thought, imagined and desired. Since, evidently, this totality is not a chaotic mass, but has the appearance of a system—as reflection at least shows— I may call it a universe. To apprehend it in its vastness (*bṛhattva*), I must go back to nothing short of the naive position. The physicist is busy with his microscopic tennis balls, his electrons, his point-events and space-time relations; and whatever theoretical value these concept-entities (the neo-logician will not permit us to regard them, with Karl Pearson, for instance, as "conceptual models" or "shorthand descriptions" only) may possess, they are no substitute for the actual, concrete universe of experience. Similarly, the logician's apparatus of terms and propositions and the activity by which they deduce other terms and propositions from them, may be an important ontological and cosmological secret, but it is *not* also the concrete universe. Lastly, the idealist, too, is, commonly, so very busy with relations, and the principle or principles constituting relations, in other words even his interest is, generally, so decidedly analytic and constructive, that we cannot expect from him—easily and directly at any rate—a present of the concrete, the whole concrete and nothing but the concrete.

Such theorizing attitudes are, therefore, hindrances rather than helps to the essay to which we have now addressed ourselves: what is the concrete fact of experience? To apprehend and grasp in its concrete actuality and wholeness we must, in the first place, disburse our minds of all theories, and lay aside every theorizing attitude. This is the first requisite, and it is more nearly fulfilled by the plain man in us, than by the thinker or philosopher.

The second pre-requisite is that we must lay aside, for the moment, all pre-conceived notions (which are veiled theories) which may circumscribe, mutilate or otherwise disturb

the concrete, live fact. A moment ago we were speaking of Experience being the only indubitable fact; but where did Descartes come at length by doubting everything till doubt was dead? To *Cogito*—I think. But "I think" is not the concrete whole of experience at any moment: it is the reflector's or psychologist's review of it, rather a part of it. Concrete experience is or exists even where there is no such reflective judgment; and where reflective judgment is there, it is there as a part or section of a larger whole, imbedded in a richer whole comprising that judgment and much besides. What is my whole experience at this moment?—No sooner I ask this than I begin to perceive that the fact of thinking, or the judgment that I think or experience (identifying one with the other) is a segment only of a larger fact which is simply experience. "I think" is not thinking or thought; "I experience" is not = experience-whole. This ought to be plain enough; but Descartes was bent upon proving something—a proof whose cogency, one may think, melted in the Transcendental Dialectic of Kant's Critique of Pure Reason. But whether Descartes' demonstration was valid or not, it is clear that Descartes' statement of the "Given"—I fear some neo-pragmatists would object to calling it the "Given"—was a partial treatment, and his treatment was partial because his interest in the "Given" was special.

In a similar way, the empiricist's exhibition of experience as a manifold or complexus of associated ideas and impressions is not a true portraiture of the Given. Experience broken into a series or a sum—and the terms or members labelled as impressions and ideas—is not the same *fact* as the experience itself. In each one of these cases, as we shall see later, the experience-whole is veiled, dissected and operated upon. If the experience-whole be represented by the capital letter E, then, it ought to be at once perceived that E is not = a-b-c-d- . . . . that is, the elements analytic thought may discover

therein. Nor can E be fully and adequately represented as a series as, for instance, Hume and the *Vijñānavādins* did or even as a "stream" as William James did, recognizing the links or shades (states of transition) between substantive states. These are very important points, and we shall have occasion to deal with them more fully when we come to study E or Experience in the next lecture.[1] Here we desire to rivet attention on what appear to us the preliminary obstacles in the way of getting at the Fact.

We have now formally introduced the Fact—with a capital F. It is, of course, the universe of experience which has not been either "veiled" or "treated". We have seen at a glance that theories "treat" it, and by treating it make it something else—which something is, indeed, a section of the universe, but not the universe itself. Similarly, notions and reviews about the Fact give us something which is not the Fact. Any interest, any bias, any partiality will, in this way, operate as a factor of treatment. To get at the Fact—the Continuum and Universe of Experience, we must, therefore, put ourselves, as nearly as possible, into a perfectly impartial and disinterested attitude. It is undeniable, of course, that what we totally have or what we totally are, is always a continuum or universe, no matter what "treatment" our interests —theories, notions, partialities and pragmatic ends—have made of it—whether such treatment has yielded a large mass of fact or a small, a concrete segment or an abstraction. The Fact never ceases to be other than itself; but reflection, judgment, analysis, and so forth—though immanent in the universe of Fact—may induce us to *think* that the Fact is as *they* paint it for us. There is the rub.

[1] Compare, however, the position of Vedānta as regards the seamless unity of *Cit* or "Consciousness" of which *Pramātā* (Measurer or Knower), *Prameya* (Measured or Known Object) and *Pramāṇa* (their Relation) are but three "Conventional" sections (*Avaccheda*). Vide *Vedānta Paribhāṣā*, etc.

One of the many solid services rendered by William James to Science is the recognition by him of what he called the "fringe" of consciousness—those outlying fields of in-attention and semi-attention which spread, so to say, round the "focus" of attention or "regard" as increasingly fading zones of feeling or awareness. The mariner's searchlight plying in a dark night is an apt analogy and has now become classical. Our consciousness, at any moment, is never exhausted by what happens to be at the focus or the nearest lighted zones that may be definitely apprehended or discriminated by us. The outlying zones have also to be taken into account. Consciousness, at any moment, is poor, cold, even unsuggestive and unmeaning, *minus* these outlying vistas of in-attention or the "fringe"—as James has fully shewn in his inimitable way.

Any one looking up to the sky in a clear night will readily perceive what the "fringe" means. He may be especially looking at a particular star or group of stars; and when he is asked about his perception, he commonly says that it is that particular star or group of stars. But, evidently, this is his *review*, his judgment—pragmatic or interested as we shall see —of what he has totally and actually perceived. That star or cluster of stars then lie at or near the centre of his attentive regard, but the "fringe" is undoubtedly a much wider fact. Not only many other neighbouring stars, but, possibly, some portion of the landscape too, are there in his visual manifold —though but dimly cognized or felt, and, therefore, silently ignored when he passes his perception in review, and formulates a judgment like this—"I see the star Sirius; I see the Great Bear." This is but a slice selected—because that slice interests him then and is useful to him—out of a larger mass of visual manifold.

But his perception, then, is not confined to the visual manifold, though he professes to review the skies. Undoubtedly many sounds, smells, organic or somatic feelings, and so

on, all dimly felt, and not taken up into the review or judgment that follows, enter into his perceptual tissue or complexus then. But he is not interested in them then and does not recognize them.

Nor is it summed up by his perception-complex merely. Perception has, commonly, reference to what apparently comes from outside through the senses. Now, the actual universe of experience of our observer includes not only the entire perceptual complex, the focal features as well as the "fringe", but it embraces other "elements" also—in giving an account we must, in a way, be analytic— such as ideas, memories, emotions, desires—a vast inner complex concealed, then, in a mist of more or less in-attention or non-regard. Surely, when our observer is looking at a star or cluster of stars, his inner, conceptual, "subjective" apparatus is not inactive; and though, for the time being, his gaze may be directed outward and not inward, he cannot, by that act, make the subjective half of his universe non-existent. But his interest being elsewhere, he may *think* and *talk* as if this subjective half were not in his actual universe of experience then—as if that universe contained nothing but the interesting star or cluster of stars upon which he may happen to bestow his regard and lay his emphasis then. But, obviously, this is a mistake, and one that is practically useful. Non-selective regard or regard distributed impartially over the whole field will make living and thinking practically impossible.[1]

Hence the selected, chosen slice of fact is pragmatically important; and man's thought and discourse have been disciplined in a school that has for its motto—"Life before all else". In this way, a distinction has existed between the actual, concrete universe of experience, and that especially

[1] This, as we shall more clearly perceive later, is the sense of calling the *Brahman* ("Immense") *avyavahārya* (non-usable) as the *Māndūkya Up*. for example, does.

interesting and useful section of it—often a very small section—which man has schooled himself into thinking and talking as his perception, his idea or his emotion at any moment.[1]

A study of this universe of Experience, E, will form the special theme of my second lecture. We have seen already that this universe—this Continuum (the terms "manifold" and "complex" and so on seem to me too strongly suggestive of the theories of analytic psychology), is larger, richer than what our theories, notions, introspections, judgments and discourses make of it. All these operations, immanent in it, *veil* its true proportions and posture, and *treat* it into various special forms, fold it, so to say, into various special fashions which are interesting and useful to us, but which forms and fashions are *not* the universe itself in its entireness, givenness and freshness. We have called it Experience; and, if that term should suggest the opposition of the subjective and objective, thought and thing, we might call it simply the Fact, F.

Evidently, the dimensions of F are indefinitely large: no one can say that the "fringe" extends thus far and no farther. It is also undefined. But in it a Principle that measures, limits or finitizes is operative: whence we have facts dealt out to us in handy parcels, properly labelled. Clearly, this operation involves *veiling* of the whole and *treating* of the sections or parts. Now, we may say at once that the Fact, large, unmeasured and undefined, is the first sketch of *Brahman*,[2] the measuring and limiting principle is the first sketch of *Māyā*, and the two aspects or components of its operation, veiling and treating, are *āvaraṇa* and *vikṣepa* respectively. Thus, almost without suspecting it, we have been led right

[1] Cf. in this connexion the well-known characterization in the Seventh Chapter of *Chāndogya Up.* of *Bhūman* and *Alpa* (the Great and the Small).

[2] Cf. also *Chāndogya Up.* VII. 25. 1 & 2—"He is below, He is above" . . . etc.

into the heart of Vedānta Philosophy. We have seen that the right beginning for it is not an examination of Idealisms, Materialisms or other " isms ", but a brave dismissal of theory, at least *ab initio* and provisionally, and a frank, plain and naive [1] recognition of the fact of experience itself.

[1] In certain types of Vedānta, the term *sahaja* is used to connote " natural and true ".

II

THE FUNDAMENTAL POSITION

I OPENED my first lecture with a query as to the first beginning of thought, and found that it resolves into several problems, of which the epistemological one was found to lead us into the arena of metaphysical controversy—the serbonian bog of "high" philosophy where generations whole have sunk; and, glancing at the unsettled and uncompromised state of affairs in that court—which has not changed since the birth of high speculation in man—we thought of discovering a way of escape, which we found not in following the beaten track of the theorist but a pathway quietly stretching across a common, unmapped and uncharted ground which the plain, naive fellow, strong in the assurance of his common-sense and instinct, has trodden ever since the time the Pithecanthropos skull changed into the Eoanthropos. That unmapped, uncharted ground we have found to be the Fact or Universe of Experience, in which the subjective and objective, the thought and thing—if these "poles" have differentiated themselves at all—all lie imbedded together, constituting one integral tissue of fact. It is true that, probably, the Pithecanthropos, assuming that he has been in our direct parental line, is also a "specialist", a chooser; that he has his interests and partialities; even his unconscious theories and notions. But still, on the whole, the primitive man, the savage and the child, in all their special shifting and handlings, *veil* and *treat* their world of fact less materially and sweepingly than we, for instance, do.

In an Appendix lecture we shall briefly advert to this thesis that man, in his savage condition, has never been without—as, at least, the archæological evidences that we now possess will not fail to shew—an intuition, we will not say, judgment or concept—whether tacit or explicit—of the unmeasured and undefined background of his existence-experience (we so put it in order to avoid antithesis between the two) which we have, at the close of the first lecture described as the Universe of Fact or *Brahman*.

We have recognized that the Continuum or universe of experience is an undefined whole. Conversely, what is defined, or can be defined, is not the whole, not the concrete. This ought to be patent to intuition. A man inspecting a star or cluster of stars, has his experience defined with respect to those elements; and if he cares to shift his "searchlight", some other element, not discriminated and defined before, now becomes discriminated and defined. In this way, many elements—sights, sounds, smells, tastes, organic feelings, emotions, thoughts, etc.—which were below the line of effective consciousness or attention, may emerge into the limelight and formally make their "appearance"; they are now noted, figure as terms in judgments like this—"I see this object", "I feel this pain"— and are remembered. What is called introspection in psychology is competent—if we overrule for one moment Comte's objections—to take note of such appearance in the limelight. Introspection or reflection is *not* competent to grasp the concrete whole of Experience. It was another invaluable service done to the Science of Knowledge by William James when he pointed out the enormous difference, commonly overlooked, between an experience and a representation of that experience in thought—introspection, reflection, recollection and judgment. A perception and a thought or idea of that perception do not differ merely as an original and its copy differ. I need not go farther into details,

but if the modern student of psychology has learnt his business well, he will at once perceive that Experience-mass, which is undefined in itself, becomes defined *in part* by introspecting, reflecting and judging processes coming to play upon it.

And the beauty of the thing is that though those processes are *immanent* or involved in the experience-whole, or they may evolve from it, that is, from the stresses in it, and though these processes *treat*, and to that extent, *define*, the Mother-Stuff and the Universe "in which they live, move, and have their being", the Universe, as a whole, never ceases to be undefined. In other words, beyond the realms that have been discriminated and taken stock of, we are always sure to discover, in a disinterested intuitive survey of the universe of experience, a margin of the undiscriminated, a residuum of the undefined. In this sense, the universe is larger than the largest stretch of our reflective or introspective survey.[1]

In that Universe or Fact (as we have called it) is a movement or operation—not to be interpreted necessarily in terms of time and space (and when the neo-Logician says that terms and propositions by their agency *move* to other terms and propositions, he does not want us to understand this movement also as one in time and space), which Principle of Movement we may call by the name "Stress". This Stress is not something external to the Fact: it is in it, and of it; or better still, we may even say, Fact = Stress, regarded from the point of view of movement or operation. But it is advisable to distinguish one from the other; because, in common parlance, "stress" is associated with change, stir or disturbance, whilst, it may so turn out that the Fact involves a placid aspect—an aspect of quiescence. If the identity, Fact = Stress,

[1] Compare the whole drift of the dialogue between Nārada and Sanat-kumāra in the VIIth Book of *Chāndogya Up.* in which the latter leads the former step by step (*tato bhūyah*=larger than that) to the supreme experience of the absolutely "Great" (Bhūman) which is undefined and unmeasured.

is to be maintained, both placidity and stress will have to be re-understood. This we shall consider later.

Let us, meanwhile, in default of such reinterpretation, regard the Stress as in, and of, the Fact. Even apart from the proving of the identity above referred to, this statement that Stress is in, and of, the Fact need not suggest dualism, open or veiled. The whole is not dichotomized, made two or many, by the parts imbedded in it or operations going on in it. Dichotomy or duality or polarity there may be between one Fact-section and another, but none between the Fact itself and its sections. It is not, in its wholeness, determined by any operations immanent in it. This is, however, not to say that the Fact, at least as we apprehend and intuit it, is a statical, unalterable entity, not affected by any stresses that may work in it. An observer gazing on a silent landscape has, apparently, not the same universe as that in which, other elements remaining the same, elements of sound are introduced. In this way the universe of experience is constantly moving. But, then, the point is this change or affection or determination (whatever we may call it), *in so far as we can formulate or define it, as a definite strain-form*, can, with logical certitude, be ascribed to, or fastened upon, parts or sections only of the Fact, and not the whole. With regard to the whole—the provisional whole that we are now treating—we are probably entitled to say this much it has *moved*, when a new operation has appeared in it, or an existing operation has taken a new direction and produced a new result, as in the above example of the silent landscape and the vocal landscape. Beyond making this general assertion of moving or straining, we cannot define the whole itself, the universe, by any definite strain-form: such defining is possible in regard to the parts or sections only.

Stress producing strain (movement or change), though pertaining to the provisional whole—the reason why I call it

"provisional" will presently appear—appertain, in definite, definable form, to sections only in the whole. So that the whole is not, in this sense, defined by the operations in it.

Now, what, fundamentally, is the work the operative *élan* or impetus does in the universe of Fact? The answer was indicated at the close of the first lecture: it limits, finitizes, defines, measures. The whole itself never yields to these operations: the universe of experience never, at any moment, ceases to be undefined and unmeasured; and it ever exceeds all limitations or boundaries that we may set up or draw. These boundaries partition and hedge round fact-sections, one kind of experience from another, one item of a manifold from another. But can we say that Experience itself, including the focus and the "fringe", is so much and not more, that it definitely ends here? We are not asking reflection, review or judgment, which are swayed and bound by pragmatic interests, and offer to self-consciousness definite points of interest only as if those were the actual concrete whole of experience. They ignore the complete *curve* of experience—the ascending and descending slopes—and offer us the crestal points only: in this way, we are sophisticated into a belief practically so useful—that our judgments about experiences are the experiences themselves.

The use of symbols sometimes makes relations clear. If Experience-whole = Fact = F, any measured out, discriminated, defined section of it may be represented by f (small letter). And any review, reflection or judgment will, then, be f'. In a previous work written by me some years ago (*The Approaches to Truth*), I attempted to frame a Science of Fact employing a number of symbols and operations first defined; and my hope was that such a procedure, if judiciously adopted and courageously followed, would lead to a considerable simplification in matters of abstruse, metaphysical thinking. The symbols to be employed, if they are adequately to represent

the elements or classes, may not, in all cases, be themselves simple or elegant. But cumbrous and complicated though they may be in some cases, their use may lead to a simplification of the statement of the cases and problems involved therein: and since solutions generally suffer by reason of the statements of the problems being confused and uncertain, the use of symbols may, to some extent, smooth and straighten the path leading to right solutions.

Now, in the case under consideration, if we employ three distinct symbols—on good grounds of course—for Fact, fact-section and review and judgment of fact-section, then, having these distinct symbols—F, *f*, *f′*—staring us in the face, we shall the more easily avoid the subtle mists of confusion and uncertain groping—the unsuspected pitfalls of cross-definition and cross-thinking. From these, one may rest assured, have sprung almost all the graver ills that Philosophy has, ever since its birth, been heir to.

If we are not to trust reflection, review or judgment as our guide to the Fact itself, what are we to trust then? We have called the true guide Intuition, and while now we already have distinguished it from perception, introspection, reflection, review and judgment,—all partial, sectional methods,—we cannot now formally enter upon a study of this method. In that study it will appear that whilst it is the final, supreme method of Fact-apprehension, it admits of grades or degrees of validity, and, therefore, is susceptible to cultivation and development: so that, the Fact itself as apprehended by this method, will have grades of Fact-ness. Our Facts are, commonly, provisional Facts: the Supreme Facts—as apprehended at the highest level of intuition—is *Brahman*. This we shall more clearly see as we proceed.

Meanwhile we find that the universe of Experience is itself undefined though a defining, discriminating and measuring operation may be going on in it: by this, we have seen,

sections or elements are defined. But it may be asked—is it not defining Experience to describe it as a universe? If by 'universe' we mean a system, a logical order, that is, one to which the rule of logic pertains, which yields itself to calculation, ratiocination or deduction which is ordered by correlativity and consistency, then, it may be said at once, that Experience-whole is not one such. The concept of order applies to classes (k) of fact-sections (*a*, *b*, *c*, . . .)—to the relations of the discriminated classes (k, k′, *k″* . . .); even, as we believe, to the totality of the classes or groups discriminated or defined in the whole (E or F). That is to say, it is posssible that the sum or synthesis, k+k′+k″+ . . . . is a system or logical order. But as E or F+is *not* = k+k′+k″+. . . ., that is, the sum of the defined and discriminated classes or groups in itself, we cannot assert that E or F itself is a system or logical order. The concept of system has only an immanent application to the Experience-whole: if we must express in diagrams, we can say that this concept—and, we shall see, any other except that of Being—is a circle that falls within, but is not coincident with, the circle of the Experience-whole.

Note the negative equation, above set forth, namely, the whole of Experience is not equal to the classes with their elements k (*a*, *b*, *c*, ...), k′ (*p*, *q*, *r*, ...), k″ (*α*,*β*,*γ*, . .), and so on, that are discriminated and defined in it. A margin of the discriminated always spreads, a residuum of the undefined always remains, beyond the farthest limits to which, in the Experience-whole, we have taken the processes of discrimination, definition and classification. The defined is, thus, always set in a larger and sustaining background of the undefined. This, as any other statement, concerning Experience should be made good by a direct appeal to intuition in concrete cases.

As B. Russell says in his Essay, *The Theory of Implication*: "Since all definitions of terms are effected by means of other terms, every system of definitions which is not circular

must start from a certain apparatus of undefined terms." Not only mathematical systems, but all sciences, must start from an apparatus of undefined terms. Now, "Exhibition" is the name proposed by some (Edwin Holt, for instance) for those fundamental concepts or undefined entities which we simply point out and name, but do not, or cannot, define. As logicians now speak of an hierarchy of Concept-entities (as did Plato of old in conceiving his hierarchy of Ideas of which the idea of Good was the highest), we have, correspondingly, an hierarchy of sciences and it is quite possible that the entities or concepts that figure as undefined or fundamental in one science may be sought to be defined in another.

For example, in empirical psychology, consciousness may be adopted as a fundamental concept; or in physiological psychology the following statement by Perry may especially hold: "Where the motion of the physical science is the determining one, and this is very commonly the case, the world gets itself divided into the physical and the psychological realms, the former being employed as the standard and defining world". But both consciousness and physical being—commonly called "matter"—have been sought to be defined. Consciousness, for instance, has been defined in a very interesting manner by the writer to whom we have more than once referred. Edwin Holt: "All *being*, . . . is fundamentally neither mind nor matter, but one neutral substance. Certain relatively simple combinations of the neutral entities are the logico-mathematical terms and system; certain more complicated aggregates are physical bodies in their spatial and temporal relations; while the yet more complicated aggregates defined by the response relation are the manifolds that are known as mental". Having conceived consciousness "as a cross-section of the infinite realm of being (or environment) and a cross-section that is defined by the responses of a nervous organism", the author adds: "I shall call the

environmental cross-section the 'Psychic cross-section' or 'consciousness' or 'mind', and later on 'soul': and the individual members of this cross-section I shall call 'sensations', 'perceptions', 'ideas', *et cetera*, just as one calls the units of a physical manifold 'atoms'. But their substance remains always neutral; for it takes the *entire* cross-section to constitute a mind, and its individual components are no more made of mental substance than they are of cross-section substance, or no more than physical objects, as we have previously seen, are made of physical substance or 'Matter'."

This quotation is interesting for more reasons than one. In the first place, it speaks of an attempt made to define (or deduce) both Mind and Matter in terms of more fundamental concepts. In the second place, it says that the fundamental entity is "neutral" (and, it may be noted *Brahman* in Vedānta is neutral too; the word is neuter too; but of this more in the proper place). In the third place, it says that consciousness or mind (the two are equated to each other; though, following James, the author recognises the "fringe" also, and very pointedly calls attention to the distinction, often overlooked, between immediate consciousness and reflecting consciousness, which latter, in his Psychology, called the "remembering, judging thought") is a whole or class only (just, for instance, as the brain is the totality of organised cells and fibres within the skull, but is not these cells and fibres distributively), so that what can be asserted of the collection or whole cannot necessarily be asserted of the parts or elements distributively, and *vice versa*. Hence, the author argues, though the collection or whole is "mental", the components thereof—perception and so forth—are not necessarily so.

Of the many points of interest presented in this position, we may especially note two which are pertinent to our present enquiry. *First*, consciousness or mind is not sought to be

defined in terms of matter, nor is matter sought to be defined in terms of consciousness, but each is defined in terms of something more fundamental which is here called "neutral stuff or being". But can the process be reversed—can the neutral stuff—in whatever way it may be conceived—be defined in terms of mind and matter? If the relation between the mother stuff and its evolutes, mind and matter, were like that between water and hydrogen and oxygen gases, then, the stuff being, *ex hypothesi*, more complex than mind and matter, could be explained in terms of the simples. But the stuff is not so related to mind and matter. Instead of the stuff being, like water of the two gases the product of mind and matter, it is the latter that are evolved by the agency or activity of the mother stuff. This, therefore, is the undefined fundamental in relation to both mind and matter. We shall see that this view, broadened where necessary, will show a very close likeness to the view of the Fact that we are now trying to get.

Secondly, it gives us a certain derivative explanation of consciousness which is looked upon, apparently, as the same as mind. We shall have occasion to enquire later whether this be a right derivation and definition of consciousness; and if so, whether consciousness, so defined, can be looked upon as the same as Experience or Fact. It is assumed that an infinite realm of neutral being, neither mental or material, exists; the nervous mechanism, which is a part of that neutral being, makes a cross-section, that is to say, it selects for response only a part of the whole, whilst to other parts it is irresponsive or practically so. Now, the totality of responses resulting from, or incidental to, the cross-section made by the nervous system of the neutral whole constitutes mind or consciousness. Obviously, there are as many forms of consciousness as there are kinds of nervous system to make their cross-sections of stimuli and responses; and since even the plant has now been telling its secrets of "nerve" response

too plainly to warrant doubt or disbelief in an honest enquirer, we must no longer deny consciousness or mind to the plant.

All this, of course, is a move—a very determined, forward move—in the direction of a correct and complete view of the universe we live in. But we run certain risks in thus moving without first making sure of the point that we start from. That point must be such that it may remain absolutely fixed and unshaken: because that point is to serve as the "origin" of all possible systems of "co-ordinates", the directrix, or the centre or the pole of all possible frames of reference. That point is the Fact or Experience-whole. If we must decide to define consciousness as the author quoted defines it, then it must forever be borne in mind that "consciousness" is a term which does not mean—denote and connote—what Experience or Fact means. And if that be clear, it is clear also that in giving a derivative or deductive definition of such consciousness,—(we are not now discussing whether the deduction is substantially correct or not)— we are far from giving a definition, deductive or otherwise, of Experience-whole or Fact itself. It is doubtful if Prof. Holt could be induced to accept Experience-whole as a term synonymous with his neutral manifold: he finds the term "idea" or "thought" too pointedly suggestive of the idealistic theories, and of "the representative theory of knowledge" which, as he takes some pains to show, is at the bottom of the whole "rotten" business of idealistic and materialistic philosophies. Will he have the same sort of prejudice against Experience?

By Experience-whole is meant, I repeat, not the subjective half of the universe as distinguished from the objective, thoughts and feelings as distinguished from things and relations, but the undefined, seamless but varied continuum of existence, in which subjects may, by an analytic operation, dissociate themselves from objects, ideas from things, but

which is *not*, in its whole-ness, determined and defined by such operation, and become either subjective or objective, either a complex of ideas and their relations or a complex of physical objects and their relations.

And here is the commonest and profoundest of all miracles: the Whole, by a Stress immanent in it, moves continuously so that sections in it are being defined in ever new forms and relations; and yet, the Whole remains, in spite of all these internal movings and definings, undivided and undefined. In other words, the life of the Fact involves what appears to us a contradiction: by an involved operation the Universe is continually tearing itself into shreds and again knitting them together into more or less transient textures—it is ever operating, analytically and synthetically, upon itself, and yet all this operation leaves it a seamless, undivided continuum as ever. *These* two fundamental characters of the Fact are, therefore, never negatived by an operation or movements which seems to annul them with respect to the sections or elements evolved in it. When I think I am seeing a star or cluster of stars only, my thinking or reflecting experience performs a feat—practically so useful—which is twofold: it cuts away the object in the "focus" from the "fringe" or background which, together with the "focus", constitutes an integral whole; and it *veils* or *ignores* or *disowns* the integral whole, and presents or recognises or owns only the focal star or stars. It admits what it is interested in and it wants, and shuts out what it does not want. The very possibility of this pragmatic operation depends upon a stress in the Fact itself that *measures* and deals out.

When especially studying this measuring Principle (*Māyā*), we shall try to see what "cutting up" of the whole, stitching together of parts, owning and disowning in plain terms mean. Meanwhile, due insistence should be laid on one point: sections or elements of the Fact never, in actuality, exist apart from the whole in which they are; the defined order, collectively or

distributively, never exists by usurping, in reality, the being or the efficiency of the undefined whole. In other words, the undefined and undivided (that is, seamless) whole is never displaced and effaced by the classes and elements and relations springing into being. It is merely in the *interested*, *pragmatic*, partial reflecting and judging consciousness, that the whole seems to be displaced or erased. This sort of disavowing, disowning or ignoring in review what, doubtless, is there in the Fact, is what we mean by "veiling". In this way, when I am looking intently at a particular star or rock, I am veiling, that is ignoring, the universe of many other dimly felt sights, sounds, touches, somatic sensations, emotions and remembrances which, in their undefined totality, constitute the world for me then. These other elements, defined by analytic thought and discourse, lie swept together in the whole in an undefined conjugation to which the logical concepts of "totality", "synthesis", and so on, do not strictly apply. All these are thought-constructions (not, necessarily, "subjective") upon a datum which, in its entireness and purity, defy all defining and constructive treatment.

We have seen that the Stress operative in the bosom of the Fact is a measuring, limiting and defining Power. This conception of Power, now introduced, will later on be particularly considered. Now we note merely this: the measuring Principle is one that *determines* what, in itself, is undetermined; and such determination is effected by an apparatus of fundamental and derivative principles—constituting a deductive hierarchy—which, at one end, are the abstract logico-mathematical concepts (terms and propositions), and at the other, the detailed laws and principles which determine the concrete, particularized order of natural phenomena—physical, vital and mental. *Māyā*, the Measuring Principle, carries in her womb, as a seed or germ is supposed to carry within itself, the potency and plan of its development, this whole apparatus

of legalised determination, this cosmic design and pattern according to which the world of events must exist and change. And as the Fact exceeds both the subjective and objective denominations, and, in itself, is neither the one nor the other, so the Stress that measures and determines, bears neither a subjective nor an objective character and label: it does not take on the character and title of the sections which its own dissecting operation brings into being and measuring act fashions into ordered systems of relations.

We must, therefore, avoid two misconceptions: first, that the forms and categories of defining and measuring things and events are only subjective or ideal—" conceptual models " only—; and, secondly, that they are empirical and objective only; that they are and operate whether thought thinks of them or not; and that, in so far as thought or consciousness is itself determined by some of these laws and discovers them and some more (namely, those relating to objective phenomena), this circumstance has to be explained not, as rationalists and a-priorists have done, by postulating or pretending to "prove" that such laws are native to the constitution of thought itself and imposed on the brute, blind " matters " of experience, but by the fact that, whether they be laws of thought or laws of nature, they *are* objective, and have empirically imprinted themselves on the subject's thought, though with a longer chain of heredity in the case of the so-called " necessary " laws than in the case of those that are manifestly empirical. This controversy between a-priorism and a-posteriorism, subjectivity and objectivity of laws, has raged long and hotly; but the view of Stress of *Māyā* that we are here expounding will take away much of the reality and zest from this historic wrangling of opposing schools, since, neither the Fact nor the Stress operative in it have any special affiliation to what are contrasted, in reflecting and judging thought, as the subjective and objective orders, co-efficients or terms.

The Measuring and Limiting Principle, with the apparatus of 'logical manifold' and determination involved in it, is, in a sense, neutral and "indifferent" in relation to the subjective and objective orders which are defined and ordered by it. And Bertrand Russell and some other exponents of mathematical logic appear to have immensely advanced the cause of truth by their insistence on the necessity of our having, once for all, recognised that the supreme seat of Being and Efficiency in the universe is neither in mind nor in matter, but a "neutral" stuff (a term which appears to have been first brought into currency by Dr. H. M. Sheffer of Harvard) and that, the apparatus of logical deduction, whether in the realm of ideas or in that of physical events, cannot be tagged on either to ideal or to material parentage. The same apparatus of measurement works immanently in both; and truth or correspondence between ideas and things, subjective deductions and objective occurrences (that is what verification of ratiocination is) is due to the fact that the same apparatus fashions and works both.

In recognising this, we do not subscribe to the creed of the "neutral stuff" in its entirety. We may have occasion, hereafter, to settle accounts with this view of the universe. Meanwhile, I take it that we already perceive the extent of relevancy which the present discussion of the *locus standi* of the Measuring Principle possesses in our essay to grasp, so far as that feat may be possible, the fundamental postures—I cannot say definitions or determinations—of the Universe of Experience. We have seen that, in its entireness, in concrete actuality as distinguished from its representation in thought and discourse, that universe is always an undivided, seamless continuum, of *being*—I do not say, ideas or physical objects—, and that, similarly regarded, it is also undefined. We have just now seen that a logical apparatus—an apparatus of automobile deduction—is at work in the bosom of that universe of Fact,

by reason of which elements are marked out and measured and correlated and determined according to a system of principles that can be, in point of fundamentality, arranged as an hierarchy of Being-Efficiency-Concepts (if I may be pardoned for coining this cumbrous but cautious term). By the working of this apparatus of laws or determinants (*Niyati* or *Rīti* as we shall call it), is the Universe or Fact itself determined, made into a logical order? Considerations before advanced have, already, prepared us for the answer—No; the Universe or Fact itself is not determined and made logical by logic and determinants working immanently in it; Fact *as such* is undetermined and alogical.

To resort to symbols again for one moment. Suppose the classes comprised in the Universe with their included elements or components be—k (a, b, c, . . .), k′ (p, q, r, . . .), k″ (α. β. γ, . . .) and so on. Then as we have seen already, E (Experience) or F (Fact) is *not*=k (a, b, c, . . .) + k′ (p, q, r, . . .) + k″ (α, β, γ, . . .) +. . . . In other words, Experience-whole *exceeds*, by the "measure of ten figures" so to say (as the mystical passage, often quoted, in the famous *Puruṣa Sūkta* in the Rik and Atharva Vedas puts it), the sum of all discriminated and defined and determined groups of objects that reviewing thought has been able to put together and recognise as a system. In other words still, the Measuring Principle can apply its "measures" only to that section of the Whole, large or small, which it has measured out of the unmeasured: what follows from the Principle of Limitation is restricted to the limits that the Principle has determined in the unlimited.

All this sounds enigmatical, and too forcibly suggestive of the transcendental dialectic—"jargon" as some unappreciative critics have thought—of the post-Kantians, notably of Fichte and Hegel; but, nevertheless, the meaning is plain enough. I have, or rather am, a universe of experience.

Within this universe I discriminatingly note or define various elements—sky, earth, rocks, trees, meadows, houses, sounds, smells, birds, animals, fellowmen, ideas, emotions and desires. In the original datum or stuff they lie swept and interwoven together in a manner that is immediately patent indeed to intuition, but which it requires analytic regard, reflecting or judging thought, to be recognised as a logical manifold or system of definite classes of things with their subsumed members, or elements.

The classes and their elements are, of course, not created out of nothing—the "Void" of Pure Being—by analytic or discursive thought, or by the Measuring Principle which is at the root of all operation in the universe. The Fact, as we have known it, is not the Void of Pure Being, not featureless, but with an infinity of features. But an undefined, unmarked, unlabelled continuum of features (discourse cannot help suggesting analysis) which intuition alone can take in or apprehend, must not be confounded with a system or logical manifold of marked and labelled objects and events, subjective and objective, which reflecting and judging consciousness has taken stock of and passed into discourse. If we never allow ourselves to forget the vital distinction between immediate consciousness and reflecting or judging consciousness, we shall not confound the Experience-whole without definite bounds with the systems evolved in it with bounds and domestic "economy" defined and settled, simply on the plea that both present features. They do; but not in the same way; one is for intuition, the other is for reflection. Nay more: even after reflection—or, if that be suggestive of the Kantian dictum, "Understanding makes Nature", we may say, the Measuring Principle which is at the root of both subjectivity and objectivity, and, therefore, cannot be thought of as "mental" only—has carved out a defined and arranged mass out of the undefined (but not chaotic; so we have often called it a

"universe" which term is, however, only approximately applicable) whole, the whole and the logical order mapped out within it do not exist in the same way. Since, as we have seen, the logical order evolves out of the whole not by displacing or suspending it in actuality (though it may commonly be so in selective thought), but the two—we are again speaking in terms of analytic thought—co-exist, as a part imbedded in the whole co-exists with the whole, we must have two altogether distinct ways of taking or apprehending them: understanding for the logical part, and intuition for the undefined whole.

Essay to find out the state of affairs in the logical universe, the universe of discourse, you will have to pursue a certain familiar method which may be called discursive thought or understanding; or it may be called the method of *comprehension*. But if your interest is not too exclusively bound by the systems comprehended, you feel that *these* are not all; that the systems comprehended, marshalled in clear light in clean-cut proportions, are, like the myriads of stellar systems "discovered" by the star-gazer's telescope and photography, set in a larger—Heaven knows how much—background of real universe not yet discovered and defined, mapped and photographed. Physical Science—indeed all Sciences as can be easily seen—becomes possible by what is called "limitation of the data". Not only the physical universe itself, but any concrete particular in it, is so very "large" and complex and unmanageable as regards its actual data, that some sort of selection has to be made, which means that some of the actual data or some features of the actual data have to be admitted in analysis, calculation and deduction, whilst the rest have to be rejected or eliminated. So that the data computed in physical science are both abstract and incomplete; it studies systems that are finite and abstract. This circumstance has been supposed by many to be evidence that

physical science, in its theoretical part at least, is a dealer in mathematical fictions and conceptual models only; whilst others, not willing to go so far as this, have paused on the way and discovered themselves torn by inner dilemmas and perplexities. No less a mathematician than Henri Poincare said as to the validity of mathematical science,—in which also lies the soul of Physical Theory,—"The possibility of mathematical science seems an irresolvable contradiction. If that science is deductive only in appearance, where does it acquire that perfect validity that no one thinks of setting in doubt? If, on the contrary, all the propositions that it enumerates can be derived from one another by the rules of formal logic, how is it that mathematics is not reduced to an immense tautology?"

On our part we do not see why one should not agree with Whitehead, Russell and others as to the general position, *viz.* that mathematical deductions, whether aptly called tautologous or not, do not shut us up in an ideal or conceptual world only; that their being necessary propositions in the realm of thought is not incompatible with their being equally necessary determinations in the realm of nature. Yet, in the realm of nature these determinations—this logical order—can be proved to hold with respect to defined, and more or less abstract, systems. Concrete particulars have to be "bared of their irrelevant trappings" (as Holt puts it) in order that their logical meaning can be deduced.

We shall, in due course, be called upon to take a critical survey of this spacious field of knowledge; but we here only passingly note that discursive thought or ratiocination is the method suited to this logical sphere; and that for apprehending —we do not say, comprehending or understanding—the Experience-whole or Fact of which this sphere forms (as we know by intuition or immediate consciousness) only a part, as also for apprehending "the fundamental apparatus of undefined

terms" which, as Russell pointed out, is the postulate of all logico-mathematical deductions, we must fall back on a method of knowing more fundamental, more direct and sweeping than ratiocination,—a method that we have called Intuition.

The third lecture will especially be a study of the methods and instruments, but even pending a special and critical study, it may have become clear perhaps that the undefined and undetermined Experience-whole is larger than the totality of defined and determined systems in it, and that while it is for ratiocination to compute and correlate these included systems, it is for intuition to assure us that the Whole itself has never been computed and correlated by ratiocination. In one word, whilst the computed part is a logical system, the Whole for ever remains alogical. This, as we may at once perceive, is the most fundamental characteristic of the Fact, which being given, other fundamental characteristics (being undefined, undivided, and so on) necessarily follow. As we know, the most fundamental character of *Brahman* intuited by the seers of Vedānta is just this alogicality.[1]

Now, this means that none of the concepts of logic—none of the "measures" as we put it before—apply to the Fact in its concrete entireness. Schopenhaur called Space and Time the great individualizers, and in the Āgama Śāstra, as it will be elsewhere seen, the latter at least is called a *kancuka* or contracting factor. They are the "measures" of the Measuring principle. These "measures" do *not* apply to the whole as such: the whole is not here or there, or even strictly speaking, everywhere; it is not now or then, or strictly speaking again, always. Not only what are called "abstract" space and time, but even "concrete" forms—Bergson's "duration", for instance,—do not sum up, though, undoubtedly, they are immanent in, the whole Fact; so that this is not in its wholeness

[1] Cf. *Katha Up.* I. ii. 7, 8, 9, etc. and also several verses in the *Iśa* and *Kena* and other Upanishads.

(though it may be and has been conceived as), a beginningless and endless drift, duration or evolution. We shall see that such thoughts or pseudo-intuitions do not, of course, merely give us appearances of the Fact that are false or illusory; they may give us realities: but reality and Fact are not co-extensive, the former being logical ('real' being one 'pole' of a correlation of which the other pole is 'unreal') the latter alogical, and therefore, *exceeding* the logical. Real and unreal, as we shall see, are "poles" evolved by the Measuring Principle, moved by a pragmatic impulse, out of a neutral stuff of *being* (*Sat*) which is Fact-ness. Real and unreal are categories which do not, therefore, apply to the Fact as such which is *being* as such. *Sat* and *Satyam* (Real) are not the same.

The Forms and Categories of Kant, or those assigned by preceding and succeeding thinkers, have, thus, only an immanent application in the universe of the Fact, whereby sections only of the whole can be ordered and determined. Kant himself was too clear-sighted to fail to perceive that the forms and categories have an empirical applicability only; that any attempt to extend them beyond the limits of empirical data will fling us into paralogisms, antinomies etc. The Ideas of pure Reason are Ideals or Regulative Forms only, at any rate unless they are made good by Practical Reason. Now, our position is this: The empirical data *plus* the realms of Pure Reason constitute the defined or definable logical order *immanent* in the Fact which *exceeds* it; and whatever be proved as to the relative validity of the empirical forms and the ideas of pure reason (we think Kant's position is open to adverse criticism in this matter), neither the forms nor the ideas can circumscribe and possess the *whole* of Experience which cannot be equated to empirical data *plus* the realms of pure reason.

Having thus summarily disappointed the categories of thought and discourse in their aspiration and supposed title to possess the whole, we need not scrutinize the claims of each

distributively. But we wish to especially mention two: the category of causality and that of number. There is nothing in our position to warrant the supposition that these are *a priori* and subjective only; that mind by *its* function, as expressed by these "ideas", defines, determines and orders the objective "matter" of experience which is without these or other forms; our posititION affords no basis for subjectivism of this type or any other; Fact is not either subjective or objective; it *exceeds* both the "sections".

Now, it should be asserted at once that the Fact as a whole is neither cause nor effect, neither substance nor attribute. And, from the numerical point of view, it is neither one, nor two, nor many. These categories relate to the defined, logical section of the Whole (or *Pūrṇa*) only.

An intuitive glance gives us these fundamental "negative" characters of the Fact: it is alogical—undefined, undivided and undermined. Negation, however, means not that logical characters are *excluded* from, and have no place in it, but that they are *exceeded* by it.[1]

[1] Katha Up. I. iii. 15, as also many similar texts in the *Bṛhadāraṇyaka* and other *Ups.*, negate form, touch, motion etc. in the *Brahman*; but there are other passages, too, which say that it is *Brahman* and no other that sees, hears, touches, moves, thinks, wills, feels, and so forth. Māyā Vāda view takes *Brahman* to mean Pure consciousness only, which in itself *excludes* all forms and changes. But the "Texts" whilst fully admitting the Pure Principle do not confine *Brahman* to this aspect alone; so that, while all forms are *in Brahman*, It exceeds them all.

III

BRAHMAN AS FACT

It has now been perceived that the universe of experience as a whole is neither the subject nor the object of thought and discourse. Such universe is inalienably given—not necessarily in a ready-made, finished and statical "shape"—in and as experience; but, as our interests are partial and regard selective, we do not "take in" in review or representation *this* universe. Even our sensations and perceptions, *e.g.*, the rustling of the leaves or the objects of a landscape, themselves seem to be conveniently snug and small. But it will be seen that such sensations and perceptions are sections of the Fact, and not the whole Fact itself. In the first place, the perception is owned whilst its "fringe" or background or context, though undoubtedly also given, is ignored, overlooked and disowned, because all that has lain in the shades of in-attention away from the focal illumination. Such ignoring of the whole and bestowing of regard on sections is practically useful. Life, as we are required to live it, would be impossible without special interests and selecting regard; what we commonly take as our consciousness, is a cross-section of the Fact-whole made by the constituent stresses which define us as individual centres; and this cross-section cuts the whole in both the perceptual and conceptual planes; so that not only our reviews and representations but even our "views" and presentations appear to be small and defined, though, in actuality, the whole experience is never, even when the

small and defined have reserved all *effective* consciousness, other than vast and unmeasured.

In my last lecture I tried to lead, by what appeared to me the shortest route, to the most vital position of Vedānta as taught in the Vedānta, that is, Upanishads, itself, *viz.*,—Experience-Whole or Fact is, as such, alogical. We have, I believe, perceived in a fashion what this means. And, I believe, too, that a direct, unsophisticated view, not especially looking for anything, will make it clear that this background of alogicality sustaining, and yet exceeding, the logical order of thought and discourse—or if that be suggestive of idealism, the systems of things and events discriminated, defined and interrelated—is no *theory*, no *idea*, no suspicion, no induction or deduction; it is the Given itself, the Fact itself.

Nothing, perhaps, will bring into stronger and clearer relief this background of alogicality than an exhibition of the logical system, not indeed by its side, but within its embrace. I will quote a summary of the essentials of mathematical logic as given by Edwin Holt in his *Concept of Consciousness*: "We have found that its subject-matter is a system of being, or as they are often called, universes of discourse. Any system of being, if it is a coherent or true system, arises from a certain Given consisting of terms and propositions that are in the system. The Given together with these latter are the system. The act by which the thinking-mind explores those parts of the system that ensue from the Given is called deduction by logical necessity or simply deduction. It is ordinarily asserted that inconsistent propositions cannot be, that is *are* not, together in one system. Furthermore, the fundamental terms are undefined; but they have being in the system, and if they are also to have being in the exploring-mind of the individual who apprehends the system, they have somehow to be exhibited to that mind. But this exhibition is a psychological and not a logical

consideration. Other terms may be defined 'in terms of' the fundamental terms, and in that case the former are essentially more complex entities. The relation of simple to complex is asymmetrical, and it would not be possible truly to define simple terms by means of others that are more complex."

Following E. V. Huntington he notes in an earlier passage that the fundamental entities of logic are of two kinds—the undefined symbols of elements or terms which, if not to be exhibited, must be named, and the propositions, postulates or hypotheses from which the entire algebra follows by logical *deduction*. Of these he considers the former class (terms) to play a passive, and the latter an active part in the logical system. One can easily see what the relative activity of propositions means.

This summary of the position of Mathematical logic shews clearly enough that *within*, in fact at the base of, the logical system or ordered being-and-experience itself, there are fundamental concepts or entities of two kinds that are undefined—that can, accordingly, be simply exhibited and named, but cannot be defined, analysed and deduced. But he who takes cognizance of this system ought to be able to stretch his vision farther—and look beyond the system itself at the encompassing undefined, which cannot even be exhibited. We refer to the alogical whole out of which the logical order has evolved, and is evolving, and that shows its *percentage* plainly enough by evolving, even within its own bounds, the polarity of the undefined base and the defined superstructure. It is the Stress operative in the Alogical Fact that, in evolving in part as the logical system, *polarizes* itself as the undefined fundamentals and the defined derivatives. Such *polarization* is a vital disposition of the Stress in the Fact.

Prof. Eddington, writing from the standpoint of the Relativity Theory (of which we shall hear more) says:[1] " We

[1] *Mind*, New Series, No. 114, April, 1920.

believe that the ordinary objects of experience are very complex; in order to understand their mutual relation and to 'explain' the phenomena, they must be resolved into simpler elements. Whilst it is a reasonable procedure to explain the complex in terms of the simple, this necessarily involves the paradox of explaining the familiar in terms of the unfamiliar. Thus the ultimate concepts of physics are of a nature which must be left undefined; we may describe how they behave, but we cannot state what they *are* in any terms with which the mind is acquainted. The entities that appear in physical theories fall into three categories. We take for illustration the electro-magnetic theory of light. There is first the æther. The word brings before the mind the idea of a limitless ocean pervading space: but during the last century all the properties which would make the æther akin to any known fluid have had to be abandoned one by one. At the present time it would seem that the only property it possesses in common with a material ocean is that of being three-dimensional—and even this is now challenged by the relativity theory. To describe the nature (as distinct from the *properties*) of such a medium in terms familiar to the mind is impossible. Further, the æther is not itself a subject for physical measurement. Secondly, there are quantities like electric and magnetic force; their nature is undefinable but their intensity can be measured by practical experiment. It is fundamental in the theory of relativity that anything measurable must necessarily be of the nature of *relation* between two or more constituents of the external world; accordingly we call objects of this second class relations. Thirdly, we have light, an object of experience; it is something common to our mental picture of the universe and to the analytical world of physics. The three classes are accordingly: (1) elementary analytical concepts, undefinable and unmeasurable; (2) relations undefinable but measurable; (3) objects of experience, which are definable."

This puts the position of science in as clear a light as could be desired. The undefinable and unmeasurable is the starting point of all mathematical and physical theories. But Prof. Eddington asks why should we dig into the mystery of existence at all, and "not be satisfied when we reach the stage of dealing with things which can be measured?" He says: "The Physicist is satisfied, and rightly so: and then he is not usually occupied with evolving a complete scheme of things." Then he proceeds to look out for a good possible site for a bridge between the mathematical theory and the universe of perception. And as I have myself essayed in these lectures to make the experience of the naive, plain man my base for flying into the heights of the philosophy of Vedānta, so Prof. Eddington makes "the objects of this world as immediately cognisable to the mind—they are our definables"—the site where a bridge can be most naturally constructed between the perceptual manifold and the analytical theory.

We shall have occasion to cast a longer glance at the analytical theory or theories of physical science in future; here we shall only say this (quoting Prof. Eddington again) that the fundamental constituents of the world (the word is used in a technical sense in the Relativity Theory) have not become the less undefinable—indeed they have become more so—because the relativity calculus has, within so short a space of time, been so eminently successful in rounding them into a neat, coherent, measured unity (the problems raised by the quantum Theory as Russell observes in his *Analysis of Matter*[1] still, possibly, remain hard nuts to crack). Says

[1] 1927. Prof. Eddington says: "Atomicity is manifested not merely in matter, but in connexion with radiation in a large number of phenomena known as quantum phenomena. Our present attitude before these discoveries is one of bewilderment; they have baffled attempts to formulate a general law; and the most successful partial explanations proceed on lines which outrage the canons of thought of the older school of physicists."

Prof. Eddington: "In the relativity theory of nature the elementary analytical concept is the point-event. In ordinary language a point-event is an instant of time at a particular point in space; but this is only one aspect of the point-event, and must not be taken as a definition, because the space and time of experience are derived-concepts of considerable complexity. From what has already been said, it will be understood that the point-event is necessarily undefinable and its nature is outside the range of human understanding. The aggregate of all the point-events is called the 'World', and we postulate that this aggregate is four-dimensional . . . a particular point-event can be specified by the values of four variables or co-ordinates, which in practice are usually taken as three co-ordinates of space and one of time. Between any two neighbouring point-events is a certain relation known as the 'interval' between them. The relation is a quantitative one and can be assigned a numerical value. *The term 'interval' must not be taken as any guide to the real nature of the relation, which is beyond our power to conceive. The name refers not to its nature but to certain of its properties* . . . The interval is not quite so transcendental as the point-event, because we are able to measure an interval practically with scales and clocks . . ."

He then proceeds to add that the world as the aggregate of point-events interrelated by intervals (and the aggregate need not be homogeneous and continuous as regards the laws of interval in its different "regions"—so that "there may be in any small region some law for calculating the interval AB, which need not be the same in all parts of the world") might have been regarded as the classical æther of physics; but that the conception of the æther itself has been changing and the "change from a three-dimensional to a four-dimensional aggregate is sufficiently fundamental to justify a new name."

Well, then, this authoritative statement of the fundamental position of relativity Physics[1] makes it abundantly clear that the analytical concepts of point-events, "intervals" and the four-dimensional aggregate of point-events called the world, are more or less "transcendental" concepts—more transcendental as regards certain elements than as regards others—which, though they have made definite regions of the world amenable to calculus or measurement, have not made the world itself, in its fundamentals, amenable either to conceiving or understanding. Thus we have this paradox to which Prof. Eddington himself has referred: analytical concepts, which themselves are more or less inconceivable—the point-event more than the interval—have conspired and helped us to conceive, measure and deduce inferences in definite regions of the world.

This paradox, undeniable as it is, is pregnant with at least two vital suggestions of meaning: first, the analytical concepts of point-event, interval and the rest, though original and fundamental in relativity physics like terms and propositions, classes and elements, identity and correspondence in logic, are not, from the standpoint of experience, the original datum or Fact itself: that these analytical entities are born out of a veiling and treating movement in the Experience-whole which is *the* Fact. The Given is not an assemblage of point-events and intervals: the Stress operative in the Given must cut up the continuum and parcel it out in its bits (abstracted) before point-events and the rest can appear, whether in actuality or in conceiving. The very description that these are analytic, shows that a continuum or whole has been analysed, may be unwittingly, to give birth to them. The later attempt of science is to put together the bits again

[1] Cf. that given by Dr. Whitehead in his Principles of Relativity; see also a summarized account of his Principles of Natural Knowledge given by Dr. C. D. Broad in the same number of the *Mind* as cited *ante*.

according to the laws of interval, and to construct a patch-up world again as the aggregate (with possible discontinuities) of connected point-events. Now, the bits abstracted from the original stuff naturally indicate where they have come from—that they have been dug out of an unfathomed mine of alogicality, and are, accordingly relatively alogical themselves—that is, undefinable, and, sometimes, also unmeasurable. This unintelligible character attaching to them points to the fact that they are domiciled in the realm of the alogical, and are but aliens in that of the logical.

But this fundamental place assigned to the undefined concepts in the economy of the logical system has a meaning more concretely suggestive than the above. It shows not merely that the logical "lives, moves and has its being" in the alogical, but that *within the logical system itself*, the Alogical Being-Power (an idea to be explained later) has so stressed as to exhibit itself, as hinted before, into two poles—the undefined and the defined, the unmeasured and the measured, the un-understood and the understood. The tiniest as well as the most gigantic phenomena in Nature will but too plainly exhibit this polarity. A particle of matter, a germ-cell of an animal or plant, an emotion or desire—whatever instances of world-events we may take,—we cannot fail to perceive that alongside of that which can be defined, measured and explained in them, there is invariably a residuum of something that cannot be defined, measured and explained. And this residuum is not merely that which is *not yet* understood (like, possibly, the quantum phenomena referred to before) but, alas, also that which (like the "point-event", relativity space-time, and so forth) seems to be hopelessly ununderstandable.

In fact, the residuum of the undefined presents all the appearance of being graded—and like the colours in the rainbow these grades imperceptibly shade into one another—the more fully understood (*e.g.*, the deductive sciences) passing

into the less fully understood (*e.g.*, the inductive and empirical sciences), and this, again, passing into the least understood, and so on, through all the scales of intelligibility, till, at last, the intelligible realm merges into one that is absolutely unintelligible.

The meaning of meaning being what it is commonly understood to be, one may say that the *whole* of the meaning of a fact or assemblage of facts is logical; that, in other words, meaning cannot be alogical; and further that a fact is significant to the extent that it has been or can be logically assimilated; so that a fact or part of a fact, which has not been so assimilated is simply unmeaning. Now, if we adopt this identity, claimed by some and apparently countenanced by common-sense, of meaning and logicality, then we must hasten to admit that Experience or Fact as a whole is unmeaning; that the immanent Stress in the Fact by which the meaning is evolved out of the unmeaning is itself unmeaning; and furthermore, in every class or system (*e.g.*, of point-events and intervals, whether "space-like" or "time-like"), in which meaning has been evolved, and which, therefore, is understood or understandable, a polarity is created (by the action of the Fact-Stress) of undefined (and, therefore, to that extent unmeaning) fundamental premises or principles, and defined and deduced conclusions; and furthermore still, this polarisation is not abrupt and simple, but is attenuated into, and stretched over, a whole scale or gamut of intelligibility.

Approaching the matter from the physicist's point of view, Prof. Eddington says some words that seem pertinent to our present problem: "The laws of mechanics, of electro-dynamics, and of gravitation cover almost the whole field of physics; and yet we have seen that not one of these imposes any constraint [we might say, 'determines'; as we suggested before, the Stress in the Fact or the Fact as Stress determines sections in it, but in doing so, it not only draws upon the absolutely

undetermined Mother-Stuff, but polarizes within the sections themselves into that which is determined and that which is not determined; so that there is invariably a residuum of the undetermined in every species of the determined. We shall more clearly see this later on.] on the free arrangement of the external World. Are there then no genuine laws of the external world? Is the universe built from elements which are purely chaotic?" Whilst we do not admit any partition, other than pragmatic, between "internal" and "external", and have, therefore, to modify the statement that the mind "imposes" its laws upon Nature, we cannot fail to perceive that there is a great deal of real suggestiveness lurking behind the query which Prof. Eddington last puts. We would, however, substitute "alogical" for "chaotic".

We need not follow, at any rate now, this distinguished exponent of the relativity theory, in his conjectures as to what he calls the "true laws of nature" (nature-in-itself is not, then, strictly speaking, "chaotic", as distinguished from those that follow from certain "postulates" in the mind. We shall have in a manner to deal with it when we come to settle the issue of reality *vs.* unreality. At present we are more directly concerned with the suggestion, believed to be more likely by him, "that our analysis into point-events is not final, and if we could carry the analysis beyond the point-event to something still more fundamental, then atomicity and the remaining laws of physics would become obvious identities . . . . . . Whatever the constitution of the external world we can pick out a four-dimensional aggregate of entities which we may take to be our point-events since these have been left undefined." So, it is well to remember that the physicist's analysis of the world into point-events is not final; that analysis might be pushed back to something more fundamental; and that if that more fundamental analysis should reveal a hitherto unknown and unsuspected constitution of being,

relativity physics and calculus would not necessarily have to be cast away; for, even in that constitution it may be possible "to pick out a four-dimensional aggregate of entities as point-events".

If the point-events were defined, they could not be made to fit in with *any* constitution of the nature of things. As we shall see elsewhere, the concept of point-event, in its essentials, can be affiliated to the Vaisheshika view of the constitution of the universe (particularly as regards the elements of *Ākāśa*, *Kāla*, *Dik*, and *Paramāṇu*), to the Sāmkhya view (as regards especially *Mahatattva*, *Ahamkāra*, and *Tanmātra*), and to the Vedānta view (in what respects we shall indicate later). The relevant and important point is this: the Relativity Principle which has now given to Science a new orientation, and most probably, a correct one, has not chased the undefinable out of the scheme of beings and it has not laid us under any logical necessity at all as to our accepting or not accepting a particular view of the real constitution of things. In other words, our relativity physics has not pre-determined our metaphysics, though, of course, like any other promising and successful theory, it has overhauled the apparatus of measuring and understanding things, and, indirectly, led us to a right appreciation of the verities.

Before we proceed to a consideration of the methods of apprehending the Fact, we shall do well to pause just for a moment to hear another weighty (though hesitant and guarded) pronouncement of one who is, to-day, generally recognised as one of the leaders in the domain of scientific methodology. After illustrating that, possibly, there is no escape from the universality of physical causation, Bertrand Russell observes: "This, however, is perhaps not quite the last word on the subject. We have seen that, on the basis of physics itself, there may be limits to physical determinism. We know of no laws as to when a quantum transaction will take place,

or a radio-active atom will break down. We know fairly well what will happen if anything happens, and we know statistical analysis, which suffices to determine macroscopic phenomena. But if mind and brain are causally interconnected, very small cerebral differences must be correlated with noticeable mental differences. Thus we are perhaps forced to descend into the region of quantum transactions, and desert the macroscopic level where statistical averages obtain. *Perhaps the electron jumps* (in its orbit) *when it likes; perhaps the minute phenomena in the brain which make all the difference to mental phenomena belong to a region where physical laws no longer determine what must happen.* This, of course, is merely a speculative probability; but it interposes a veto upon materialistic dogmatism. It may be that the progress of physics will decide the matter one way or other; for the present, as in so many other matters, the philosopher must be content to await the progress of science."[1]

This recognition, timid as it necessarily must be from the physicist's standpoint, that in the realm of microscopic phenomena at least, though, seemingly, not in the realm of the macroscopic also, there may be loopholes for likes and dislikes (*e.g.* of electrons jumping in their orbits, and undetermined correspondences, *e.g.* between cerebral motions and mental events), is important, as shewing that a natural philosopher who is hopeful about the laws of physical causation triumphing over realms hitherto, generally, believed to be intractable and alien to mathematical calculus, may, yet, entertain a suspicion that, possibly, the empire of physics may not be wide enough after all to cover the microscopic as well as the macroscopic phenomena of nature, and that a margin and a substratum of inexplicability and indeterminism may be beyond and behind what its calculus has been, or is ever likely to be, able to

[1] *Analysis of Matter*, 1927, p. 393; italics are ours.

reduce to well-ordered and well-regulated provinces of knowledge.

Russell advises the philosopher to await the sequel of physical science. He must wait, no doubt, for corroborative and circumstantial evidence; but, I submit that, for direct and primary evidence for the *fact* that the inexplicable and indeterminable is ever beyond and behind all things and events, supposed to be explained and determined, in the universe, he *need not* wait. He *has* it, in a shape not to be denied or questioned, in his given Experience-whole which is the *fact* compared with which the physicist's four-dimensional continuum of points with their space-like and time-like intervals, and all the rest of it, is only *theory*. What I directly and undeniably have or am (this is far from solipsism, as we shall see), is, apart from veiling and ignorance and pragmatic dissection, the Experience-whole; and while any theory, physical or other, may, with varying success, essay to render us a logical account of elements and parts in the whole in terms of other elements and parts, it may not, for a moment, be thought either that the whole itself, the Fact itself, has become thereby docketed, catalogued and reported, or even that any element in the marked-out realm itself, such as the electron in its orbit, the radio-active atom in its breaking up, and so forth, has become thereby *completely* explained and determined.

The Fact itself gives us assurance that a Being (or Fact), essentially alogical and undetermined, by its own stress or activity orders and determines itself *in part*, and that stress operates in polarity in such wise that in the economy of the constitution and behaviour of " the merest trifle " in the world, there is a pole or aspect of that which is defined and determined and another that is undefined and undetermined. The Experience-whole or Fact is, provisionally, the *Brahman*—the Immense, the Unlimited, the Undetermined. We see now the mystery, so often and so enigmatically spoken of in the

Śruti, of *Brahman* evolving by Its own Power, or rather as Power, the universe of Name and Form (that is, the defined and determined order), and "involving" and "insinuating" Itself again into every one of Its evolutes.[1] The result of this miracle of involution is that the *Brahman* or Fact, as regards Its being and fundamental characters, does not cease to be, not even in the detailed forms, in evolving as the world of names and forms: every form unmistakably shows that it "lives, moves and has its being" in *Brahman*, and whatever be its special defined and determined characters, it never ceases to bear a general character also which is that of *Brahman*, and therefore, alogical and undetermined. An understanding of this "miracle", for which we have so long prepared ourselves, will make easier, as we shall by and by see, the understanding of such ancient *Śruti* texts as "All, verily, is *Brahman*";[2] "*Brahman* is smaller than the smallest and greater than the greatest"[3] and texts of a like import.

We have said that the philosopher has the amplest guarantee for the truth of this, and, though the progress of science shewing us the limits, if any, of a logical *résumé* of the universe is a factor relevant to detailed corroboration and verification of the truth immediately guaranteed by Experience, it must not be laid down as a condition that the philosopher *must* wait in the ante-chambers of the physicist's laboratory for the latter to come out and declare that his results have been such and such, and that the philosopher has no other choice than to abide by them in shaping the essential concepts of his philosophy.

The methods of the two are not the same. One we have called "intuition", the other "ratiocination", using both

[1] *Taittirīya Up.*, II. 6, and also elsewhere.

[2] *Chāndogya Up.*, VI. 14. 1.

[3] *Kaṭha Up.*, I. ii. 20.

terms in their broadest senses. We have hurriedly seen also that the ratiocinative processes of the scientist may, and indeed do, involve a substratum of intuition, as also the intuitive "flashes" (the "gunshot intuition" of Schelling, for example) may involve a veiled, subconscious structure of ratiocination. Each, accordingly, has grades. As we shall presently see, the Principle of Limitation (*Māyā*) has rendered, in such Centres as we are, each method into a series of ascending and descending purity and validity of higher and lower planes of true apprehension. *Māyā*, as "exhibited" before, is the Measuring Principle, and whatever it touches and handles, it works into grades and degrees, into a series with an "inferior" and a "superior" limit. Such gradation and serial form may be logical only (*e.g.* a mathematical series), and need not necessarily suggest, and be expressible in terms of, spatio-temporal relations. This only means that there is stress or movement in the Experience-whole or Fact itself by which it does not remain absolute one or absolute many, that is, unrelated, unconnected, discrete particulars, but becomes, in the defined realm, One-in-Many or Many-in-One; and this it can conceivably become by evolving grades, degrees and series which combine the concepts of identity and difference.

To recognise that A and B, two notes in a symphony or two colours in a band, for instance, are graded, that B is higher or lower grade than A, that they form terms in a series (*e.g.* the arithmetical, geometrical and harmonic in Algebra) is to recognise that A and B are identical as well as different: the common difference or the common ratio in the arithmetical or the geometrical series indicates the precise manner in which any two terms are related. J. Royce would seek to explain the riddle of One-and-Many by the clue which is put into our hands by propositions (definitions, postulates and axioms) generating by their activity, hosts of other propositions and terms which, we say, are deduced from them. This,

of course, is the true, standard, typical implication of Many in One, and the explication of Many out of one. Nothing so delights the heart of the pure logician as this that he reclines on the Olympian heights of Platonic archetypes, and beholds the *summum genus* Concept or Idea or Ideas by their own activity sprouting, blossoming, flowering and blooming into a perfect enthralling harmony of concerted ideas. Relativity Physics has made possible such a dream of perfect harmony and smooth domestic governance of events by postulating its four-dimensional continuum of point-events, and even the suggestion of such a possibility is sure to gladden the heart of the system-hunter, such seeming "anomalies" as the atomicity of matter and quantum phenomena being still there notwithstanding.[1]

It is true, as Russell remarks,[2] "Space-Time, as it appears in mathemetical physics, is obviously an artefact, (*i.e.*, a structure in which materials found in the world are confounded in such a manner as to be convenient for the mathematician);" yet from this "artefact" (defining "compresence", "compunctuality", "point", "events", and so forth) a logical system of remarkable coherence and compactness has evolved. And though the physicist—who wishes to be "thorough" in his business—cannot forbear asking such questions as these—"Is Space-Time continuous or discrete (possibly, atomic)?" "What correspondence, if any, does there exist between this relativity Space-Time and the Space and Time of common experience?"—one thing seems clear:—Experience-whole or Fact, in so far as it yields to definition and measurement, appears to have an inner ring or core where pure logic with her perfectly disciplined and ordered retinue of mathematical formulæ reigns: this is the purely logical structure of the defined and definable segment of the

[1] See Dr. Jeans, *Atomicity and Quanta.*

[2] *Analysis of Matter*, p. 376.

Fact—It is the Realm of Pure Ideas as taught by Plato, divested of metaphor. Superimposed upon this is another structure—cruder but more concrete than the first,—in respect of which the rule of pure logic applies approximately, and, after some limitation of the data. Superimposed upon this again is the outer structure of perceptual phenomena, "brute" and crude but concrete and actual, to which the rule of Pure Concepts seems to apply roughly, with apparent reservations and exceptions. The logical constitution of the intelligible universe will in this way appear to be tripartite—with a logical epiblast, mesoblast and hypoblast, so to say.

We shall not pause to examine such a view of the logical constitution of the defined universe; but we may observe two things: *first*, in every one of these structures (that of pure logic not excepted) the polarity of the alogical and the logical, —that which is, or can be explained, and that which cannot,—unfailingly presents itself; and *secondly*, the polarizing activity appears also to be a grading activity which splits up Experience not merely into A's and Not-A's (which are logical contradictories), but into untold shades or grades of A itself, of B's, C's and so on, and links up (in "compresence", "compunctuality" and other relations) the A's, B's, C's, . . so as to impart to each class something common. In fact, there are, in the defined universe at least, no two such entities as can be exhibited as pure, uncompromising A and Not-A—that is, between which there is no concept whatever in common.

The ultimate and universal common "denominator" of things and events, perceptual or conceptual, believed *to be* or *not to be* is *Being as such* (Sat). This has been recognised by some exponents of mathematical logic with their idea of "existential propositions." We are now, however, not in quest of the common factor, but rather of the varying or grading factor. We perceive that such a

factor undoubtedly there is in experience by which it is segmented, polarized into distinctness as well as correlated into orderly grades and series. The logical epiblast, mesoblast and hypoblast before spoken of constitute a gradation and series; the methods of comprehending and apprehending the fact constitute a gradation and series.

Like the Fact itself, its polarizing and grading activity—Stress as we have called it, is alogical, that is, inscrutable. And as our analysis will later show, the fact is inscrutable in at least these four aspects: (1) The Fact as Experience whole or *Pūrṇa*; (2) The aspect of the Fact which we shall later distinguish as the Æther of Pure Consciousness; (3) The Stress or Activity or Power treating and evolving the Fact, or to put it more aptly, the world of things and events discriminated and defined therein; and (4) any particular that has been evolved in its concrete actuality. As regards this last case—to which we shall again revert—, it should be plainly seen that no concrete particular *as such*, whether thing or event, is ever understood; what we understand or hope to is the abstract structure—and the epiblast, mesoblast and hypoblast—involved in classifying the particular. An electron moving in a Bohr-Rutherford scheme is understood; but a given electron in an actual given position in an actual given configuration is not understood; so a given actual feeling or wish in the mind; a given actual tint of colour in an evening cloud; and so on.

Russell, in the footnote to page 286 in his *Analysis of Matter* disagrees from the view of Dr. C. D. Broad (formulated in *The Mind and its Place in Nature*") that complexes may have properties that are " emergent "—that is, those that cannot be deduced from the properties and relations of its elements. He believes that this is due to the incompleteness of human science, and that with the progress of science—and this is reminiscent of the confident assertion of Huxley, Haeckel

and others in the last century—this margin of "emergent" properties will be brought as near to the vanishing point as can be desired. And he instances the explanation of Chemistry by the new Bohr-Rutherford theory of the constitution of the atom.

That "emergent" properties in the last scrutiny constitute a hard, immovable set that science can never expect to successfully and finally grapple with—is an assertion that may stand. The horizon or the enveloping order of the unexplained *is* receding farther and farther, as science is chasing it hotly and doggedly; but does it seem at all likely that it will ever completely vanish leaving science the undisputed lord of all it surveys? The progress of science to the fullness of reality seems, at best, to be an asymptotic approximation; and if we have reasons to believe—we shall see if we have—that particulars and limited classes and systems are so only by a "limitation of the data", every object—even a particle of dust or a microscopic cell—being, in actuality, an unfathomed and unfathomable mine of relations, the task that science has set before itself is bound for ever to remain, from the very nature of the case, an unfinishable task.

This follows, indeed, from the principle hinted at before—the whole not merely evolves parts by an immanent measuring and defining activity, but the whole "enters into", involves itself in, every part so evolved and defined. Resorting to our former symbols, if Fact = F, and an element of the Fact = f, then this latter should be represented as $f(F)$ and as F^f—making it clear (1) that an element cannot be without the Whole Fact being, *in a way*, involved in it (in fact, it is the special way of involution that makes the particularity of the element); and, (2) that an element cannot be without the sustaining continuum of the whole. Physicists, to-day, speak of macroscopic and microscopic relations and equations; and we suggest that $f = f(F)$ is a microscopic, and $f = F^f$ a

macroscopic relation. In other words, the fact-section involves the Fact-whole microscopically, and it is involved in the Fact-whole macroscopically.

Microscopically, any particle, point or centre of the Universe *is* that universe; like the seed of an oak or the germ of a whale, it involves, that is, microscopically contains, the whole (and one need not be dismayed by the apparent triumph of epigenesis in Embryology; because this has not given the rival view of development by evolution or unfolding the final quietus). No particle can, therefore, be fully, concretely understood unless we understand the whole involved in it; and since, the whole *as such* is un-understandable, the particle is also so, if we take it fully and concretely. Scientific particles—whether conceived as microscopic billiard balls, or as centres of force, or as miniature solar systems of revolving electrons and protons, or ultimately as points in a four-dimensional continuum,—are, one and all, abstract, " bared of irrelevant details " (as Holt said), chiselled out by an operation that has been called in the classics of science " limitation of the data ". To understand these is *not* to understand " live " particles—inorganic or organic—as actually waltzing in the cosmic ball-and-concert room. Leibnitz was part founder with Newton of the Calculus; and we owe to the genius of Leibnitz the development in European Philosophy of the wonderful idea of the " monad ". We may return to this topic in a future lecture, but our point now is that even an element cannot be completely, that is, concretely, gripped by the most elaborate scientific apparatus that we possess or that human ingenuity can possibly design.

Neither of the equations above set forth should be construed to mean that the element or particular does not *as such* exist; that ontologically the particular, the individual is an " illusion ". Without pausing to discuss the question at this stage we may observe this—that just as the physicist's atom

has not become the less real because he now explains the difference between one atom and another by the difference in the numbers and configurations of electrons and protons in the two, and by the difference in their positions in the physical system, so we may think that individuals do not become "illusory" and "conventional" because they have to be conceived as the Whole, the "Absolute", measuring Itself out, and measuring Itself in, *in different ways, which include also their positional separateness in the cosmos.*

If analytically speaking, the whole (F) = PPPP ...... (that is a continuum of "Points" that are alike) and an accent placed at the top of a letter represent "emphasis", then one individual, (f) = PPPṖ ..... another, f′ = PP′PP.... and so on; which means that the continuum with its whole group of "points" is emphasised in P position to become the individual f, in P′ position to become f′, and so on. Our analytic representation shews that the P P . . ., though otherwise alike, are already differentiated from one another by their positions in the continuum; so that the "emphasis" that is laid upon one makes it *further* differentiated from the others. It would follow, therefore, that the individuality of a thing is not *simply* due to its position in the cosmos; it is also *intrinsic.* But we do not propose to investigate this matter of the individual at the present stage. We have seen, at a glance, that it is connected with the Whole microscopically (that is, by involving) as well as macroscopically (that is, by being interwoven into the texture of the Whole). From both these circumstances follow the alogicality of the *concrete*, *actual* individual also.

We conclude, therefore, that though the Measuring Activity has "aspired" (as one might fancy) to circumscribe and comprehend the Whole by its measuring net, the latter has slipped through its meshes as concrete particulars, and has exceeded the stretch of the net as the immense and immeasurable itself.

Now, as to the method of "apprehending" the Whole—for the consideration of which we have been preparing ourselves in these two lectures—we already noticed one interesting feature *viz.*,—this method, like the other method of logical comprehension, is affected by the Principle of Limitation and Gradation, which means that it finds itself exhibited in more or less perfect forms—arranged as an ascending series in point of validity. Intuition, as an instrument of Fact-apprehending, is not finished and perfected "on the lap of the gods", and placed into our hands as a perfect, defectless, unerring weapon. It grows, and requires to be cultivated.

Now, at the close of the present lecture, I shall, in a few words, indicate the place of Intuition in the economy of the Fact-Stress. In exhibiting to reviewing consciousness the "patent wonder" of the Fact, we must necessarily treat it analytically. A single glance may take in a whole landscape, but to review that perfection in "introspection", one must take it, more or less, piece-meal.

Fact-Stress is, analytically, and in one aspect, two-fold: Being-Stress-or-Power and Becoming-Stress-or-Power. The former is associated with, and expresses, the fact, namely, that the Fact or Experience-whole *is*, and never ceases to be; that the fundamental character of alogicality and immensity that we have found in it is, and never ceases to be; and that any other Characters belonging fundamentally to it are, and never cease to be. The Experience-Whole is, and its alogicality and immensity is, even in the process of its becoming, through its own activity, a defined, measured and logical universe. An appeal to immediate experience will verify this. The Whole never, therefore, changes so as to lose or surrender its wholeness, and the immensity and alogicality bound up with its wholeness. Becoming or Change undoubtedly there is in it; and if changefulness and unreality be made synonymous (as the Māyā-vāda School of Vedānta has done), then, the change

of, or in, the Experience-whole may be called "unreal". But that is a matter of definition.

Without as yet venturing into this question of the real and unreal—and we have seen that the Fact as we have conceived it is beyond, and unaffected by, this question—we accept the immediate deliverance of Experience—that Experience is and changes. The point, all important as it is, we do not now raise whether changing or becoming is a concept applicable to the whole as such, or only to defined and discriminated sections in it, distributively and collectively. We have seen that the Whole is not a collectivity of the defined sections or parts in it; perhaps we are entitled to go farther and say that the Whole is not exhausted by the fullest and perfectest *defined* and *logical* universe that a Perfect Intelligence would "elaborate" out of it; the polarity of the defined and the undefined, logical and alogical would still in that hypothesis remain. If this be the right view to take of the Whole—our intuition as far as it can light up the "scene" shows us the logical invariably with the circumambient and underlying alogical—, then, perhaps, change does not pertain to the Fact-Whole but only to a part and aspect of it.

This, however, is admittedly a difficult point to decide. But, in any case, it ought to be plainly seen that a Whole in which a part has changed (so that the remainder is unchanged) is, logically speaking, not identical with one in which no part has changed. Suppose we represent F as the sum of two parts X and Y; Y changes into Y′, but X remains unchanged; then, if $F = X + Y$, then the same F cannot $= X + Y'$ (logically speaking). That is to say, by suffering a part to change, F has itself changed. Logically this appears to be clear enough. What then do we mean by saying that changing is a concept inapplicable to the whole?

This is a difficult question that will require particular attention, and just now we are attending to something less

transcendental. Whether changing applies or not to the Fact-Whole—our intuition apparently refuses to carry the idea of changing beyond the objects and events that we recognise in it, though logic, as shown above, would make bold to trespass into the realm of the alogical, and assert that where a part (Y) of a whole has changed and another part (X) has remained (so be it granted) unchanged, the whole itself has changed—it is undeniable that the whole *is*: as to the concept of *being* there is no doubt, either from the point of view of intuition or that of ratiocination. Our analysis of the Fact will later reveal an aspect—this is pictorial thinking, but it cannot be helped in a matter so fundamental as this—which is the Æther of Pure Consciousness. Now, Fact in this aspect —granting that one apprehends such an aspect—*is*; and, here at least, we can assert with the confidence of intuition (though even here logic may join issue) that it does not change. But let me not surreptitiously bring in ideas and concepts that I have not first formally introduced.

Without further discussion at this stage, let us simply make an assertion to which no exception need be taken: The Whole (whatever its aspects and parts be) is, and it changes at least in an aspect or part. Intuitively, this is very nearly a self-evident proposition.

Now, I believe, we are on sure grounds also when we conceive that the whole, in its movement, exhibits a character that can hardly be better described than as fundamental Elasticity. It means this: Being and Becoming or Changing (which Hegelian logic would call the synthesis of Being and Not-Being) are both there in the Fact; the Whole is and changes. With is-ness or being, thought associates the idea of permanence, conservation and identity. With becoming or changing, it associates the ideas of movement, redistribution and difference. Let us not try to probe deeper but admit such commonsense estimates as correct. Elasticity will mean

that the action which tends to produce movement, redistribution and difference has a *re*-action (we have no means of exactly measuring it and comparing it with the action) that tends to maintain permanence and identity. In expressing the principle we speak in terms of time; but there need not be any relation of " before and after ", " now and then " between the action and the reaction. These are two differently directed (we have said polarized) activities,—and their relation is extra-temporal and extra-spatial, though the principle descends into the realm of space and time also.

The matter in a nutshell is this: Fact by its own activity moves—it may be in an aspect or part only—, whereby it is *strained*; but there is a counter-activity inside the Fact itself which tends to " correct " the strain and bring it back to its first or parent condition.

I will not pursue further this theme of Fact-change and Fact-elasticity which is rather premature, and therefore, difficult at this stage. And I would certainly have been repelled by the difficulty of the subject, if I had not felt convinced that it is only as a consequence and illustration of the fundamental elasticity of the Fact that intuition as the method of Fact-apprehension, as also many other things, can be understood. We have seen that Experience-whole, alogical and unmeasured as such, stresses to evolve a logical and measured universe within it. Such evolution of logical order, the universe of discourse, is rendered possible by the veiling and treating of the whole. In other words, the whole is " strained " by its own activity in becoming the universe of discourse. With reference to this " strain-form ", the ratiocinative method—measuring chiefly in terms of the categories of Space, Time and Causality—obtains. But, in virtue of the Elasticity above spoken of, the strain-form stresses to regain the original form of alogicality and unmeasurability that is, to exceed the constricting categories of understanding and

discourse. Now, intuition is simply this lapsing back of logicality and measurability into alogicality and unmeasurability—the transcending, not necessarily the undoing, of the limits or constrictions (*Kancukas*) that Time, Space and other categories have wrought. But being a component of the Fact-Stress, it is a graded and progressive method. This we shall more fully see.[1]

[1] In the well-known Haṃsavatī Ṛk, this Principle of 'Elasticity' which relates to Fundamental Becoming is expressed by the mystic syllable *Haṃsaḥ*, and it has been recognised as *Ṛtam Bṛhat* (the 'Great Rule' or Principle). The mystic formula shows two *polar* components: *Haṃ* and *Saḥ*. In the former, *Brahman* as Cosmic Life keeps all emergent phenomena—all fresh becoming and change—affiliated to a Basic 'Origin' (*Bindu* or *Nābhi*), whilst by the other it makes them variously expand, amplify and evolve. The curve of cosmic history, running into an infinity of phases and aspects, can, therefore, never go 'wayward and unruly', torn from the 'Great and Supreme Rule' of its Basic Origin. Every 'outgoing' step in creation obeys the 'in-going' rule of Original Reference. *Haṃsaḥ* is the *mantram* of Cosmic 'Breathing' and 'Metabolism'.

IV

THE METHOD OF INTUITION

It has been seen in the last lecture that Intuition is incidental to, and an expression of, what we have conceived as the 'Elasticity' of the Fact. Intuition is, therefore, a natural and habitual method, and not an exceptional, peculiar and privileged method. In every act of experiencing it is involved: in perception, memory, imagination, volition; even in what is called ratiocination. The "light" that gives us, immediately and in a "sweep", a glimpse of the alogical (unmeasured and undefined), which, therefore, *exceeds* the categories of Time, Space, etc., is intuition. It shews imbedded in the Whole the elements or segments that the Measuring Activity has elaborated and "sundered apart". And since, as we have seen, the Whole is only *veiled* or ignored when the elements are especially recognised, intuition may be conceived as a tendency, immanent in the Fact itself, that essays to undo or remove the veil of ignorance. This tendency to owning and avowing that which has been disowned and disavowed, has been otherwise stated as an expression of 'elasticity'. It has been so stated because the tendency is natural and operative, to a greater or less extent, in every act of experiencing. And since fundamentally, being and experience have not by us been set in ontological (or any other, except pragmatic) opposition to each other, and since Experience-whole includes both the realms of Mind and nature, we may say, in accordance with the principle of elasticity, that in *all* things and

events we shall find this principle illustrated; that is to say, all things—all centres and spheres of being—when "strained" exhibit a natural tendency or stress to remove or undo the strain.

This tendency is not confined to the sphere of the so-called physical objects: in *all* spheres of existence—physical, biological or psychical—this tendency is operative in easily identifiable shapes. A rubber ball pressed by the hand is strained; and we all see it. A billiard-ball dropping on the floor is strained also, as skilful experiment and delicate measurement will show us. Physicists have studied at length these phenomena of straining and stressing; the co-efficients of elasticity; the critical strains; and so forth. Now, we contend that it will not be difficult to recognise, under more or less thin disguises, the essence, the principle of straining-stressing, that is, elasticity, in the entire universe of experience—the vital cell and tissue, the mental percept and thought, indeed all things and events of whatever index or order.

The term "intuition" is, legitimately enough, confined to the realm of mind or "consciousness". But we should be able, without much difficulty, to recognise in the natural economics of the organic tissue as well as of the "billiard ball", forms of elasticity more or less allied in essence to intuition. It will, doubtless, be doing unwarranted violence on the settled conventionalities of language to say that the stretched string of spring "intuits" when it tends to go back to its original form; that an organic tissue "intuits" when by metabolism it tends to rebuild and reconstruct what has been, in vital processes, disintegrated and "wasted" in it. For these operations in (pragmatically) different realms, different conventional nomenclatures no doubt should be adopted and retained. Yet it may quite possibly be that *essentially* the same impulse or tendency or principle—whatever we call it—is operative, under forms that are not essential, in all these spheres of matter, life and mind.

In the beautiful working of the principle of Evolution "the natural brother of the wolf has become the faithful guardian of the flock", and to lay intelligence the metamorphosis has been not less cataclysmic than that of the anthropoid ape into man. And yet the Pithecanthropos of Java, the Eoanthropos or Piltdown man, the Neanderthal man—not to speak of other "missing links" that the future may fling as palaeontological surprises upon us—have shown that, after all, the anthropoid ape and man may be allied to each other, not perhaps through a "direct line", but collaterally, as Sir Arthur Keith and others have believed. It is just possible, in this way—and, if we keep in view the entireness or integrity of Being-Experience or Fact, we may say, it is also natural—that an integral body of Principles with necessary modifications or varieties of form and applicability, should determine the *whole* universe of existence, in so far of course as it subjects itself to determination. In plain words, it is natural to expect, keeping in view the integral character of the Fact, that we should not have fundamentally different sets of principles for matter, for life and for mind—accepting these three as the commonsense divisions of the realm of being.

True, as the Principle of Relativity appears to think, the whole realm of being may not be *continuous*, in the sense that the principles that are found to hold good in one specified region shall be found to hold good in any other. The four-dimensional continuum of points may be no guarantor for a continuum of laws and principles in the actual World. If elasticity, for example, is a principle found to be applicable in the physical realm, that is, *prima facie*, no reason why it will be found to be applicable in the organic and spiritual realms also. We should always keep our minds ready to meet and accost possible discontinuities in the course of our exploration of the universe.

Now, that this *may* be true in a certain sense need not be doubted. But the case may be special and different with certain principles that we discern in the very fundamental make-up of the Experience-system. It is not the question of finding a set of principles governing a specified region of the world, and then claiming on behalf of those principles that their applicability shall be continuous throughout the entire world, or in any other unsurveyed region for the matter of that. We start with the entire Experience-system-or-manifold; we find that in *this* there is a tendency of the measured and defined (that is, logical) to relapse into a consciousness of the unmeasured and undefined (that is, alogical) out of which it is evolved, and by which (though practically veiled) it is sustained; that in *this* the measuring or logical activity is co-present with the *de*-measuring or alogical (if one may so put it) activity; that in *this*, the former activity prevailing, we have experience more and more dissected, defined and measured (and this we call "straining"), and, consequently, greater and greater veiling of the alogical; and, the latter activity prevailing, we have experience, howsoever much dissected, defined and measured, more and more "recovering" and realizing its fundamental character of unmeasured alogicality. The two activities are the co-efficients of each other; and appear to bear a varying ratio to each other; and, whether or not it be appropriate language to call their ratio or relation "elasticity", it ought to be clear that between elasticity and the fundamental Fact-tendency here exhibited, there is a material "family likeness."

We shall not here further discuss the question of continuity, though, in another connection, we may have to return to it in the shape of continuum, in a future lecture. The mathematician's definition of continuity (for example, that given by Dr. Whitehead in his *Introduction to Mathematics*, p. 230) is a metrical definition, or one that

involves, and affords a basis for, measurement. So does his definition of Limit (*Ibid.*, p. 229.) So again is his definition of periodicity and "periodic function." Work, Energy, Action, Acceleration, Elasticity, and so forth are also defined in a similar way. All these are "current coins" in ordinary thinking and talking also. Now, one may ask: are these concepts metrical and mathematical primarily, but borrowed and loosely employed by the lay man or by the mathematician himself in his moments of lay abandon? We can answer this, consistently with the general views we have maintained as to the relative status of the logical and the alogical, in but one way: The stuff of the Fact is alogical; and though by an intrinsic process the alogical elaborates into the logical, the a-metrical into the metrical, the residuum of alogicality and unmeasurability never vanishes either as regards the whole or in detail.

Continuity, Limit, Periodicity, Series, Function, Action, Work, and so forth are, of course, there in the Whole: nothing can be outside it or foreign to it. But their being there is of different kinds of which we may here distinguish three: *first*, as intuition exhibits (without defining and measuring), them in the Whole. I am experiencing a universe now. If I accept this universe—inclusive of the "fringe"—in its entireness, without permitting myself to be bound to special interests and standpoints, I have, in that case, a universe which is not indeed a "dreary wilderness" of pure being, or an absolute abyss of unknowableness, but an immense, actual, concrete universe, with a richness of content that may be regarded as practically limitless. Features, which analytic thought discriminates as things and events of varied quality and quantity, are there, almost in a bewildering profusion, in that given universe. The "original stuff" of those which analytic thought or "the logical sense" regards as continuity, limit, series, function, periodicity is also there in it: the

original (undefined and unmeasured) data of continuity, limit, periodicity, and the rest. And it should be observed that the original stuff of continuity as intuited in the universe to which, *ex hypothesi*, we have abandoned ourselves, is *not* the same as the continuity apprehended and understood in the "normal", ordinary way, in which experiencing is pragmatic and partial (that is, swayed by special interests and referred to definite elements or aspects).

Now, suppose, we come to the "normal" state. In this there is no (avowed) impartial abandon to the Experience-whole. Portions of the whole have now been discriminated, defined, possibly to some extent also measured, and it is *these* portions that are accepted, in review or representation, as the experience: the whole has now been veiled (in the sense of being ignored in representation or discourse). In this second order of universe, arising from the circumstance of the first order being veiled and partially treated, the original stuff of continuity, limit, series and the rest has undergone a transformation, a logical transformation no doubt, but still with the veiled, discarded alogical swamping in on all sides, and investing each fact and object of common experience with a felt but unfathomed mystery of concreteness and uniqueness.

In common experience—pragmatic and partial though it be—a perception, a thought, a desire, a natural event or object (taking elements at random) possesses a character which is intermediate between what they may possess in the first order (non-pragmatic), and what they may be seen or supposed to possess in the mathematico-logical order that follows. In the lay, common order, the logical and mathematical apparatus has already set itself in motion; and common perceptions, emotions, and so forth carry signs plain enough to show that the discriminator, definer and measurer in us has already been at work. The psychology that discovers in perceptions and other "immediate" mental phenomena

sub-conscious, automatic "inferences" etc. may, therefore, be right up to a certain limit. But, I believe, the intermediate, transitional character of lay experiences is patent enough even without psychology and we need not, therefore, linger over it.

Then, lastly, in the universe of the logician the "common" experiences undergo a further transformation, become abstract, "bared of all irrelevant details". The qualitative aspect of experience becomes secondary and derivative; the quantitative aspect primary and causal. Here is the realm of logic *par excellence*—the domain of exact science, the soul of which is measurement.

Whether this realm is a perfectly ordered, coherent whole leaving no possible margin for discontinuities or even contradictions, is a question that is still unsettled; and there seems to be no prospect that it will ever be settled. Long ago said Dr. Jevons in his *Principles of Science* (Vol. II, p. 466): "It may seem that there is one point where our speculation must end, namely, where contradiction begins. The laws of Identity and Difference and Duality were the very foundations from which we started, and they are, so far as I can see, the foundations which we can never quit. Scientific Method must begin and end with the laws of thought, but it does not follow that it will save us from encountering inexplicable, and at least apparently contradictory results. The very nature of continuous quantity leads us into extreme difficulties. . . . Scientific Method leads us to the inevitable conception of an infinite series of successive orders of infinitely small quantities.[1] If so, there is nothing impossible in the existence of a myriad universes within the compass of a needle's point,[2] each with its stellar systems, and its suns and planets, in number and variety unlimited. Science

[1] See, however, in this connexion, Dr. Whitehead's criticism of the idea of infinitely small quantities—*Introduction to Mathematics*, p. 226 ff.

[2] In fact, a universe has come to exist inside an "atom".

does nothing to reduce the number of strange things that we may believe. When fairly pursued it makes large drafts upon our powers of comprehension and belief. Some of the most precise and beautiful theorems in mathematical science seem to me to involve apparent contradictions". And he goes on to illustrate his meaning.

In fact, many, if not all, of the commonest concepts of everyday use, such as change, motion and so forth, will be found, if fairly pursued, to involve contradiction. This was long ago discovered by the sophists of ancient Greece; and this also is, commonly, the main purpose inspiring the elaborate and powerful dialecties of the Nihilistic and Vedānta Philosophies—to take up for inspection any common concept of ordinary use, and proceed to show that it involves insoluble contradiction. Māyāvāda Vedānta, as we shall see, has found out contradiction in the commonest of all facts—perception, whether (pragmatically) correct or false: *Brahman*, in the sense of Pure Being-Consciousness-Bliss (an idea to be later explained) *is* in every act of perception, and also *is not*: in so far as perception gives an immediate apprehension of pure Being (*Asti*), and of pure Consciousness (*Bhāti*), and also of pure Joy or Bliss (*Priyam*), we have the *Brahman* given in it; but in so far as it gives Name and Form (*Nāma* and *Rūpa*), it gives something (neither real, nor unreal, nor again real-unreal, that is, inscrutable) which the *Brahman* is not. This, however, we shall study later on.[1]

If this is true of the Commonest articles of ordinary human use, it is true, in a much more patent form, with reference to the logical categories that we may apply to elements or classes of experience. Not to say of the ideas

[1] See, however, Bhāmati under *Brahma-Sūtra* (I. 1. 4) discussing the point whether the Absolute is unchanging or statically eternal (*Kutastha nitya*) or is changingly eternal (*Pariṇāmi nitya*). It is a fine specimen of the sort of dialectic referred to. Neo-Vedānta works (such as *Advaita Siddhi*) excel in the use of this "weapon".

of infinity, perfectness, universality and complete unity, and so on, that are "transcendental"—that is to say, not applicable to our common, sectional, pragmatic experience—, even such unsuspectedly "proper" ideas as cause and effect, substance and attribute, necessary and contingent, one and many, will, on close and critical inspection, be found to lead ultimately into unsolved contradictions. We shall not pause to make an inspection of them; but pass on to observe categorically that contradiction and irreducibility to the canons of logic are involved in the structure of any specimen that we take from the given manifold of experience, whether they be facts or their relations. Pending a searching examination of the ideas and categories referred to, this assertion may appear as dogmatic or even incredible. But, I hope, it will, when tested, be found to be true.

Even the position that Experience-whole is alogical as such, and logical in part, appears to involve the ubiquitous contradiction, already before alluded to, attaching to the circumstance of the Alogical becoming Logical, the Unmeasured becoming Measured, and yet remaining Alogical and Unmeasured on the whole and in detail. But we refer to another circumstance: The Whole is, to be sure, intuited as alogical and unmeasured from *our* standpoint which is a pragmatic and finite standpoint; but just as in the example of the mariner's searchlight the outlying dark zones need not be chaotic in themselves, but may be, for aught we know, as well-ordered as the zone now lighted up by the searchlight, so may we not think that the so-called alogical is born of the incompleteness, limitation of human systematic knowledge, and therefore, that in the eventuality of that knowledge becoming perfect and unlimited, the Whole will be found to be a perfectly logical, coherent, compact Whole? The Alogical, therefore, exists only for finite intelligence as, according to one view, chance and accident and consequent

probability, exist only in finite postulation and calculation. To Infinite Intelligence the Whole may be a perfectly logical Whole.

Now, this sets afoot a possibility we are not in a position either to consolidate or to demolish. In venturing beyond the Fact, such as intuition gives us, we are evidently beyond our utmost intellectual depth. But if we are to imagine Infinite Intelligence in terms of our own—this may be anthropomorphism (on which, by-the-by, Hegel too seems to have set his seal in conceiving his Absolute Spirit), but we cannot help it in the present case—then, we cannot help imagining It as transcending alogicality in one respect, and yet as *not* transcending it in another.

There are, evidently, two kinds of alogicality—one relative, the other absolute. The former is relative to what is only seemingly alogical (that is, undefined and un-understood)—alogical with reference to the finite understanding capacity of this Centre or that Centre. The limits of this realm of the undefined and un-understood are not, evidently, fixed; they may close in upon us, or they may recede farther and farther from us. What is undefined or un-understood now, may be defined and understood a moment after; what is "alogical" to one Centre may be logical to another. This kind of relative and variable alogicality is reduced more and more by science, and it may be easily conceivable that to perfect science, or Perfect Intelligence for the matter of that, *this* kind of un-understandability may cease to exist.

The ways of the "billiard ball" atom of the older generation of physicists were inscrutable: it was not understood, for instance, why Oxygen and Hydrogen atoms showed certain partialities in their combinations; why the properties of groups of elements were "periodic" (Mendeleef's Law); and many other things. But, to-day, the Rutherford-Bohr atom, for example, (conceived as a system of positive and

negative units of electric charge) has thrown light over many portions of the tract that were dark before. But no physicist will, however, pretend that the whole mystery of the constitution and working of matter has been made clear, or is likely to become clear, as day. The Relativity Physics has its foundations buried deep in unfathomed indefinability and inconceivability (the four-dimensional continuum of points, mutually "enclosing" events, and so forth), and, as we have before pointed out more than once, the electronic theory of matter and the quantum phenomena have increased rather than lessened the difficulties of the physicist architect in his essay to raise a perfectly coherent and systematical structure upon those admittedly "uncanny" foundations.

But the difficulties may, it is hoped, vanish on a future day. And it may be permissible to hope further that the foundations themselves will become less and less "uncanny" as our science digs deeper and deeper into the core of being. But can we hope that the basic, fundamental difficulty (as distinguished from what we may, in the light of the analogy, call the structural difficulties) will *completely* vanish for us on any future day? Is it not rather true—as Dr. Jevons in the concluding section of his *Principles of Science* remarked long ago that the fundamental unintelligibility of existence *increases* rather than decreases with the progress of science?

Does not the progress of science itself—the history of her progress we mean—prove the increase rather than the decrease? The "billiard ball" atom had been uncanny enough as a foundation of physical science. Before the discovery of the electron-phenomena and radio-activity, the Æther had been requisitioned to explain the atom (to wit the vortex-ring theory of Helmholtz-Kelvin, "the intrinsic strain-centre" of Larmor, and so on); and though the Æther has not been altogether abandoned—at least by many Physicists of note—it is generally conceded to-day that its *conception*

has ceased to be a "physical" conception; the term *quasi*-physical or *quasi*-material is still retained; but that should not be taken to mean that the Æther is, in its nature, partly inconceivable. Its *nature* has now become wholly inconceivable, though, its existence being *postulated* in terms of certain mathematical concepts, we may, starting from that postulate, understand its *behaviour*. The electron theory, in its turn, has reduced the unintelligibility of matter in so far as its *behaviour* is concerned: and even here unintelligibility has lurked behind facts that ought to be orderly enough, *e.g.*, the so-called "jumping" of the electron in its orbit of motion; the so-called "exploding" or "annihilation" of matter to which the investigations of Dr. Jeans, for instance, point; and so on.

But even assuming that the behaviour of matter becomes perfectly amenable to Calculus, we cannot stretch our imagination so far as to conceive a day in human science when the *nature*—call it substance, or stuff, or *vital élan*, or whatever else one likes—of the "electric charge" itself, or of Æther of which it is supposed to be a condition by Sir Oliver Lodge and others, will become perfectly understandable. One set of concepts may be understood by, that is logically deduced from, another set; these latter by a third set; and so on. And there seems to be no prospect of finality being ever attained. This infinite regress itself seems to be the final fact. What ground we gain in the realm of formal or structural or "behaviouristic" explanation, we lose, and perhaps more than lose, in the realm of material, fundamental and essential understanding. The more light we are able to throw on the formal or structural side of existence, the darker and vaster by contrast becomes the "matter" or substance of existence. This is a "ratio", incidental to the progress of human science, from which there seems to be no escape. The profound saying in *Śruti* is, therefore, justified: "Existence is not known to him who says he knows it; not understood

by him who says he understands it; it is known and understood by him who says he does not know and understand it".[1] Existence here need not necessarily be taken to mean *pure* Existence or *pure* Consciousness; even concrete, experienced Existence is unknown and un-understood. The wise to whom, according to the *Śruti* quoted, it is known and understood, know and understand only this that they do *not* know and understand it.

So the consideration of "formal" or relative alogicality leads us to "material" or absolute alogicality. The form or structure means a system of relations; but relations apart from a material or materials related are inconceivable, all the subtle dialectic advocacy of neo-Kantians and neo-Hegelians notwithstanding. The converse of the proposition is, of course, true likewise; matter without form or relation, matter *per se* as it is called, is also inconceivable. Conceivability or understandability is a logical character, and this character does not obtain where relations—the forms and categories—are non-existent or non-recognised. It has been claimed further that relations must fundamentally be a relation between objects and a Subject or Ego; that at least a formal or transcendental Ego (that is, as distinguished from a concrete "Person") is necessary to apprehend, if not constitute (as the philosopher Fichte would have us believe) by its activity, all relations of Space, Time, Causality, and so forth; and that, consequently, matter to be known and conceived must be matter *mecum*, that is matter as another "pole" in experience where "I" or Ego is one "pole."[2]

[1] *Kena Up.*, II, 3; etc.

[2] Cf. the Function of *Puruṣa* in the Sāmkhya philosophy; and the position of the "detached" Seer in the mystic text in the Upaniṣads often quoted—*Muṇḍaka Up.*, III. i. 1, and also elsewhere (particularly, in *Ṛgveda*, I. 164. 20).

This may be conceded even by the Realist if no gulf is sought to be interposed between matter *per se* and matter *mecum*; if, that is to say, the Kantian dictum that "Understanding makes Nature" ("out of a material it does not make"—this saving clause is added to save the "unfortunate" *Ding an Sich* of Kant) is not sought to be forced down our throats. The Realist's dictum is "understanding makes no difference to the thing experienced". But whether understanding makes or does not make a difference to the thing understood, it may be conceded that in knowing and understanding, "matter" or thing *is* matter *mecum*—matter as object related to the self as Subject—; in fact, this is a tautologous proposition: matter known is matter known. In Indian Epistemology, too, the "catalytic action" of a "Witness" ("Onlooker"—a spiritual "Origin" or "Point" of reference) has, generally, been recognised as necessary for all forms of experience.

But all this, seeking to explain the matter of experience, does not, and cannot be imagined to, explain away the matter; and not only does it fail to wholly reduce matter itself to form, quality to quantity, but it brings into ever stronger relief the contrast between the two, and, therefore, the necessary co-existence in experience and every bit of experience of what is or may be logical and what is or must be alogical.

Absolute alogicality entrenches itself not into the matter of experience alone. Why red is red, green is green, sweet is not sour, sour is not sweet; that is to say, why a particular content of experience is what it is and not anything else—is fundamentally un-understandable, however much logic may succeed in the way of "explaining" its form, relations and conditions.

But even apart from this, logic is not, as far as we can see, the absolute master in her own house, her "forte"—the

form. All explanation by induction or deduction ultimately brings us (1) to undefined and unexplained terms and postulates, and (2) to unsolved contradictions. This is the ultimate "impasse" to which Science brings us, beyond which she cannot carry us. If, for example, we postulate "points" (unextended and therefore partless) at the farthest end for explaining the structure and working of the material universe which is extended in space and time, we do not understand by what conceivable process points, both spaceless and timeless, can aggregate to form "matter" extended in space and time. In a point the value of space and time is zero. By what conceivable operation does the zero transform itself into *some*-thing? Can we conceive that any number of nothings compounded or added together will give something? Again, certain properties are ascribed to such partless points. But properties, whether intrinsic or extrinsic, cannot be easily conceived as attaching to points; for example, it is hard to conceive how a space-less and time-less point can be a centre of force, energy or event. Conception pushed beyond what is conceivable will land us in the midst of contradiction.[1]

The continuum, too, does not fare any better. In a continuum we cannot conceive any kind of movement or disturbance; since, movement pre-supposes parts moving and spaces (*vacua*) to move in; but what sort of continuum is it that has parts or particles with intervening spaces where free movement is possible? Bodies move in water, in air, and in æther; but particles of the æther itself to move require either a finer æther or vacuum. Now, the absolute continuum cannot be that, the particles of which move in a more absolute continuum or else in vacuum.

[1] Cf. Śankara's argument against Paramāṇu-Kāraṇatā-Vāda in the second Pāda of the Second Chapter (from Sūtra 12 onwards) of *Brahma-Sūtras*. See also, incidentally, the criticism of the relation of Samavāya etc.

Not only so; parts or particles in an absolute continuum are *ipso facto* inconceivable. Is a particle in the continuum the same as the continuum or different? If it be the same, then it must be indistinguishable from the rest of the continuum, and there will be no meaning in calling it a particle; if it be different and distinguishable, then the continuum is *not* continuous everywhere, but is discontinuous (that is, of different structure or value) at the points where the particles are. In other words, in the latter case, the continuum is not a continuum. The physicist's Æther involves a brood of such contradictions. The "vortex ring", the "intrinsic strain-centre" the "wrinkle" or "fold", the "closely packed conglomeration", and so forth—are all of them ideas that have torn the Æther of the physicist into a welter of "logical" contradictions.

The moment a certain idea is laid upon Æther, it is caught between the horns of a dilemma absolutely destructive of its conceivability. Either Æther is a continuum so that eddies, strains and motions do not exist in it; and if they do not, such an Æther affords no basis for physical science. Or Æther, as postulated by physical science, is not a continuum, so that there may be motions, stresses and strains in it; but such an Æther will require a finer Æther at its background, this finer a still finer one; and so on; and we have an infinite regress. In other words, we shall require an infinite series of Æthers.

These two examples show us the lurking places of alogicality in the midst of logicality. In fact, the logical and the alogical are inextricably mixed together in Experience, whether we take it in its entireness or in parts, whether we examine it in its qualitative and material content or in its quantitative and formal content. The latter is the realm of the logical *par excellence*; but it is not a realm over which logic reigns supreme and absolute. On the other hand, the former is

emphatically the realm of the alogical; but here, also, we are likely to discover features which logic may claim as her own. The plain meaning of this is that form and measure are possibly existent—latently if not patently—in any section of the Fact that we take up for close inspection. The Pareshnath Hill that I see from here looming in the distant horizon appears almost as featureless as a patch of dusky cloud; forms and features lie concealed or veiled. But as I approach the mountain more and more closely, the veiled forms become more and more revealed. In a similar way, it may be supposed that forms and measures may be latent, nascent or implicit even in experiences that seem to be formless and measureless. That this is commonly true cannot be disputed. Defined facts are fundamentally and intensively undefined; undefined facts are implicitly and minutely defined, and are, therefore, definable. Of these two categories—undefinable and definable—the former, as pertaining to the Experience-whole itself, and peeping out through "every creek and corner" of the defined also, may be the more primary and fundamental category; but the other exists overlapped and exceeded by the other, and cannot be explained *away*. In other words, the defined and definable order or aspect of the Fact—the aspect of *Nāma* and *Rūpa*—cannot be so treated as if it were non-existent, or of no psychological or logical consequence.

Now, to return to Infinite Intelligence. If we must retain the term "Intelligence" in the sense in which it is intelligible to us, then, even with respect to such Intelligence, we must retain the Fact or Experience-whole with its involved or immanent polarity of the alogical and the logical. In other words, even for such an Intelligence the alogical shall not vanish; nor shall the logical vanish. We must retain this, because such immanent polarity of the logical and the alogical cannot be conceived by us otherwise than as

fundamental; so that, Experience ceases, for us, to be experience where the polarity of the defined and undefined is not there in it, and intelligence ceases, for us, to be intelligence which does not think of experience in terms of this polarity.

But since the Intelligence now under consideration is infinite, we must conceive that It *comprehends* both the logical and the alogical in their infinite capacity—that is, the alogical in its completeness, and the logical also in its completeness. With respect to a finite Centre, both are actual as well as *possible.* Thus to us, what is logical possibly involves the alogical, and what is alogical possibly involves the logical: the defined has elements or substrata undefinable, and the undefined has elements or features definable. In other words, in our case, the defined does *not* exhaust the definable, and the undefined does *not* exhaust the undefinable. What I have understood, I may possibly have *not* understood; and what I have not understood, I may possibly understand. The Measuring principle of *Māyā* constitutes this difference between the actual and the possible in our knowledge and understanding; and this difference may be conceived to vanish in the case of an infinite or Ideal Intelligence.

But the polarity between the abolutely (as distinguished from relatively) definable and undefinable cannot be conceived to vanish in that case. For such Intelligence, therefore, the absolutely understandable is completely understood, and the absolutely un-understandable is also completely un-understood. This, in plain terms, means that God (to introduce the category), in His aspect of Infinite Intelligence or Understanding completely understands (or *comprehends*) the understandable universe, and as Perfect Intuition completely *apprehends* (that is, un-understands) the un-understandable Reality or Fact. His Being is *not* Intelligence only: His Knowledge is *not* understanding only.

Note: His Being is not—Intelligence, and His Knowledge is not—Understanding. That is, His Being and Knowledge *exceed*, not *exclude*, Intelligence and Understanding. In the finite case, both understanding and intuiting are affected by the veil: we do not at once understand matters that are understandable, and we do not intuit completely what is intuitable or immediately experiencable. Human knowledge and human science are, accordingly, progressive. In intuition we may have timeless and spaceless facts; and the intuition that gives us consciousness of time and space may in itself be timeless and spaceless; not, indeed, in the sense that recognitive reflection cannot or does not place the fact of intuition in the space-and-time order of the universe of thought and discourse, but in the sense that intuition *itself* does not so recognise—that it is an event in a series of other events and co-existent with other events.

Such confusion between the direct deliverance or import of intuition and the meaning that recognitive reflection puts upon or into it, is responsible for much lamentable confusion of thought that has vitiated philosophy. The series of "Ego"—perceptions and object-perceptions[1] of the ancient *Yogā-cāra* Bauddha, the nexus-less series of Hume, the "stream" of continuous or seamless "pulses" of later psychologists—and many similar "constructions" in philosophy show signs of the confusion above referred to. We shall not pause to examine those signs now. Our point is this: though intuition, *as intuition*, does not seem to be affected by the determinations of time and space,—(even where intuition involves a thought of such determinations, it is larger than the thought, and is not, therefore, completely covered by those determinations)—, it *is* affected by what we have spoken of as the 'Veil'.

And it, that is, *our* intuition, seems to be affected by the veil in two ways: firstly, things intuited, or experiences

[1] Ālaya-vijñāna and Pravṛtti-vijñāna.

revealed by intuition, are not of the same degree of vividness or distinctness: a circumstance whence we have our experiences arranged in zones of varying vividness, a small part generally occupying the "focus" of attention. Whether this varying tone of vividness or distinctness—that which constitutes the difference between the "focus" and the "fringe"—is intrinsic to intuition or awareness as such, or is merely ascribed to it; whether, that is to say, intuition or feeling as such is distributed *evenly* over the whole field, or is unevenly, unequally distributed, is a nicety which need not detain us now. It is abstraction already to isolate awareness or feeling from the actual content of experience; and though this isolation is permissible, it will be better now if we regard experience and the intuition of experience identical as fact, but separable in thought, description and discourse. Hence, we do not hesitate now to speak of intuition or intuitive experience possessing degrees of vividness etc.

Now, the degrees of vividness and distinctness which belong to our intuitive experience constitute degrees of veiling and revealing or presentation. It means that what has been presented at the focus has been veiled least and revealed most, and that as we go farther and farther away from the focus, things or features become more and more veiled and less and less revealed. As I have said, we do not now discuss whether, psychologically, this is the correct statement of the case or not; it is at least our *prima facie* case. This *prima facie* case being admitted, we may enquire—what becomes of intuitive experience when the veil is made to vanish? That means that the focus spreads itself and swallows up the whole field of varying semi-consciousness: consciousness becomes evenly and equally distributed over the whole field. This is an hypothetical case to which we have no parallel in normal experience. Nevertheless, we may conceive that to Infinite

Consciousness the veil may not exist in the sense it exists in our intuitive experience; that is, to It the entire field will be equally and perfectly revealed.[1]

But, suppose, on the other hand, the veil instead of vanishing increases. The realms of the unconscious and semi-conscious will gradually close in upon the realms of attention and vividness; the focus will be reduced further and further; till, in the long run, we may have the field of intuitive experience contracted into a "speck" of feeling. It is as if the radiance of the full moon shrank more and more in range till it dwindled down into the timid, uncertain phosphorescence of the glow-worm. In fact, this may be actually the case with the feeling responses of the lowest species of living beings. In our own "Centres", too, the contraction of the field of experience in this sense is not an uncommon and unfamiliar event. Contraction may be voluntary or non-voluntary. In some forms of contraction, revealing or presentation may decrease in extensity and increase in intensity; that is, the area of presentation becomes smaller, but the amount of "light" distributed becomes correspondingly greater; and, in a conceivable case, *maximum* amount of "light" may be co-existent with a *minimum* of area—what may, practically, be a "point," (or *Bindu*).

In our normal experiences, again, the contraction and expansion of the field of effective or tonic consciousness, may, in some cases, be strikingly illustrated. We may refer to the two cases of "just falling asleep," "just beginning to be awake." I have studied these cases at some length elsewhere (in *The Approaches to Truth*). In "abnormal" experiences also (including the *Yoga* experiences) we have the phenomenon of contraction and expansion of the field variously illustrated, sometimes with striking and vital results.

[1] Cf. the conception of Īśvara as a Being in whom the āvaraṇa śakti of Avidyā does not operate.

But the veil relates not simply to varying vividness or "tone" of feeling; it has a more fundamental bearing or relatedness. The intuitive field as it expands becomes more and more full and varied in formal as well as material content, in quantitative as well as qualitative richness. The zone now veiled is not simply a dimly lighted or dusky zone; it is a zone poorer in formal as well as material content. On the other hand, a zone that becomes revealed is not simply better "lighted," but one that becomes richer in varied content. Expansion, therefore, gives us not merely a clearer but a richer Whole; and contraction gives us not merely a dimmer and duskier but a poorer and simpler Whole. The first means a gain in complexity; the second a gain in simplicity.

But we must not, in conceiving this phenomenon, be tied down to spatial analogies. The scientist inspecting under the microscope a minute animalcule or a crystal has *not* his "universe" contracted into small dimensions. *Under* the microscope he has actually a large universe, and within that universe his attention may focus at some points and be thinly distributed over others—as in the case of our ordinary universe. Again, a physical theorist conceiving the constitution of the material atom after the planetary model, has not really his universe reduced to atomic or corpuscular dimensions, the complexity of the manifold being also reduced to almost featureless simplicity. If these cases be narrowly scrutinised, it will be found that the scientist while indulging in such observations and conceptions, has his being in at least two universes or rather "Wholes". While inspecting the minute crystal under the magnifying glass, he is, effectively or pragmatically, in the universe defined by the circumstances and facts of his observations; but the larger universe of "normal" experiences, comprising "irrelevant" sights, sounds, smells, ideas, and so forth, has not vanished for him then; that universe is still there, actually though more or less dimly felt, and it is there

as the background in which his effective and relevant universe of the inspected crystal is set. And, as William James and many other psychologists have made it abundantly clear, the larger universe (now the "fringe") is ineffective and irrelevant only in some ways and not in others. An "unnoticed" event in that universe may not fail to change the complexion and affect the character of the effective and relevant universe also. In fact, it is these "promptings from aside" that, not unoften, inspire our ideas and guide our steps in the relevant or pragmatic universe of observation, conception and volition.

The conclusion that we draw from these facts is important: contracting and expanding movements (connected with Fact-Elasticity before explained) going on in the Experience-Whole, the fact of apparently narrower relevant universes reserving practically all effective consciousness to themselves, is never evidence that the Whole in its immensity ever ceases to exist as Experience. The Whole as immensity[1] *is*, even where our relevant or pragmatic universe is reduced practically to a point. The fact that our more or less narrowly defined pragmatic universes are set in the background of the immense and undefined Whole, proves that contraction and expansion, or elasticity (if we so express it), is an immanent activity, which means *not* that we cannot have smaller and larger, poorer and richer universes, but that in every case,—whether the universe of acceptance be large or small, rich or poor,—we have another universe, immense and undefined, in which the universe of acceptance is embedded.

[1] Brahman or Bhūman.

V

FACT AND INTUITION

CONSIDERATIONS set forth in the last lecture show, evidently, that we have an hierarchy of universes—an ascending series, the lowest or inferior limit of which is a "speck" or "point" of feeling (such as, we conceive, may be associated with the life of an amœba), and the highest or "superior" limit is a Perfect Universe in which *nothing* is veiled, or *all* is revealed. Our ordinary experiences fall *within* this series; and *extra*-ordinary (*e.g.*, the scientist's and Yogin's) universes also fall within it. The veil affecting both the form and matter of experience is variable: it is an aspect of the Measuring Principle (*Māyā*) operating in Experience and every part of Experience. And its variability extends between two limits of a maximum and a minimum. In our universe of acceptance a lump of earth appears to be a condition of Being-Experience in which Experience has veiled itself most. We practically take it as dead, insentient matter; in other words, we suppose that the veil in it is of infinite magnitude. This however, is, according to *Vedānta*, a mistake. But we shall discuss this when we come to treat of Centres and their inter-relations. On the other hand, in plants, animals and ourselves, Being-Experience has again veiled itself in a variable manner; which circumstance, from the point of consciousness, creates a most elaborate hierarchy of more and more sentient, more and more wise and informed experiencing "Centres". In men the orders of hierarchy are, evidently variable; in the same person, too, they are variable. This, naturally raises

the question of an Highest Order—the Superior Limit of the Series.[1] In this Highest Order the veil operating in all Centres including ourselves is reduced to nothing.

The veil has, so far, been dealt with by us in two forms: in one form we have the distribution of effective consciousness or attention unequal over a field which, as a whole is actually *given* in consciousness; this gives us the distinction between the "focal" area and the gradually shaded and obscured "fringe". In another form, *which is not essentially different from the first*, we have forms and matters of the world not actually given in consciousness—the realm of the unfelt and unknown. For instance as I am writing now under a clump of *sāl* trees, only a few objects and events are in the focal light of consciousness; but a great many undoubtedly are there in consciousness or feeling. These latter, including "subjective" as well as "objective" elements, constitute the "fringe", the context, the setting or background. But even these do but constitute a small part of the entire sensible and knowable universe. For instance, now I have no feeling or knowing of the things and events in the distant Pareshanath Mountain of which I had a vivid actual experience yesterday. But these may, possibly, be there in the "background" of my mind to-day, ready as recent experiences to make appearance as memories every now and then, and, generally though unsuspectedly, to "influence" the whole tenor and tone of my present experience. In fact, the ardous mountaineering of yesterday has left a bodily fatigue which, undoubtedly, is a very substantial element in my total somatic feeling this morning; and, in the obscurer tracts and deeper beds of the "fringe", this bodily fatigue may not be there alone; my mental "context" this morning cannot, I suppose, fail to be made up of subtler echoes and reverberations of the intensely vivid and exciting experiences I so recently

[1] Cf. *Pātañjala Sūtras*, I. 25.

had. But while such subtle and elusive echoes may possibly be admitted into the "fringe-land", occurrences in the Moon or the Mars, or a distant region of the earth itself cannot be so admitted. Or to take a simpler instance: a drop of water seen by the naked eye is clear; the same drop seen under the microscope is teeming with countless inorganic or organic particles. It cannot apparently be supposed that the latter experience was already implicit in the former—that while the clearness of the drop was in the focal area of consciousness, the swarms of particles were also there, in an obscure way, in the "fringe". In other words, a line—we cannot definitely say, where—exists, beyond which the semi-consciousness and sub-consciousness of the "fringe" loses itself into absolute unconsciousness—into an abyss of the totally unfelt and unknown.

There is no doubt that such a line has to be, and is, practically admitted by us. But it is another question whether this line must be set up as an absolute boundary between the felt and known on one side and the unfelt and unknown on the other. We shall see that there are reasons why it should not be so set up. The line between the known and the unknown is of *the same kind and status* as the line, admitted *within* experience itself, between the focus and the fringe, the defined and discriminated and the undefined and undiscriminated. However that be, practically we do not take the two lines or partitions as being of the same kind: the latter confines us *within* experience itself; the former is what separates what is experience from what is not. This realm of the not experienced is believed to be a world of which the experiencer, at any moment, does not take cognisance, either in a clear or in a confused way.

That a world exists of which the experiencer at any moment does not take such cognisance, is an evident proposition, but not a self-evident one. The solipsist, the

yogācāra Bauddha, the *Dṛṣṭi-Sṛṣṭi Vādin* in Vedānta may hold that a world outside and independent of the actual consciousness of the experiencer[1] does not exist, and cannot be proved to exist. But still the experiencer has different experiences at different moments; any one of which is *not* the same as any other; and the sum of these experiences is not equal to any of these. One may grant that the last term of a series of feelings may involve a thought of the foregoing terms, but that does not make that last term equal to the whole series. Hence if we call the whole series (or "stream" or "continuum"—if these terms be preferred) the world, that world is larger than any term of the series—or the experience at any moment.

But as we have not thus far proceeded either on an ordinary idealistic or on a realistic basis, but have started with Experience-whole or Fact which combines *Being* and *Experience*, and have taken care to join the word "whole" to "experience", we need not be upset by considerations like those set forth above. Within Being-Experience-whole, such as I am, and objects and phenomena presented to me are at any moment, the veil is firstly recognisable as being responsible for the focus and the fringe: and that veil is a variable one as regards my experiences at different moments, and also as regards my experiences and yours and his. (We need not, on the basis here provided, be solipsists so as to regard "you" and "he" as but "reflexes" of the true and only centre "me".) The variability of the veil suggests a possible minimum and maximum. The veil itself has been so far conceived by us as the circumstance of something being not presented in effective or attentive consciousness; it is the circumstance of something not being revealed, manifested, recognised, accepted and owned. Now, such veil may differentiate not only the focus from the fringe, but, secondly,

[1] *Sākṣi-bāhya.*

the felt and known realm itself from the unfelt and unknown. The conception of the veil has been made wide enough to do both offices. We shall see that the two offices—the two differentiations above spoken of—are allied and essentially the same.

We have before spoken of the two aspects of the operation or movement in Experience—veiling and treating. These two aspects should not be sharply demarcated from each other. When an experience, in respect of some of its features, is veiled, and when that experience, in respect of those features, is unveiled, we have three different experiences: the original experience; the experience veiled in part; and the experience revealed or unveiled. It will be readily perceived that the first and the last, though practically taken as identical, are not actually so. I have the experience of a hill now —say, a distinct visual experience; then a mist appears and the distinct features of the hill are hidden from view; then, again, the mist rises and I have, once more, a distinct view of the hill. Here "the object" of experience is of course believed to remain the same throughout; but it requires no particularly subtle psychological sense to see that the three experiences have been different. An experience unveiled *after* having been veiled is not the same as an experience not veiled at all. If instead of taking experiences bit by bit, we take them in their seamless totality, that is, as a continuum, we can easily perceive that by such veiling and unveiling processes the continuum or whole is *immanently* treated, changed and strained. In other words, veiling and unveiling are forms of straining (changing of form or condition); so that Experience that veils and unveils its features gets itself strained thereby.

Commonsense is slow to perceive straining or treating in the bare circumstance of some thing being covered up and then uncovered, veiled and then unveiled. It imputes the unchangedness of the thing or object to the fact of experience

itself, which has the object and the apprehending subject for its two foci or poles. But there are forms of straining which commonsense is ready to recognise. A rubber ball is there; it is pressed by the hand; a glass falls and is broken to pieces; a piece of ice melts into water; a mass of cloud rises and darkens the prospect; a certain thought comes to the mind and it becomes sicklied o'er with its pale cast; so on and so forth. In fact, all patent changes of form and condition, in which not merely subjective experiences but objects themselves are changed, are regarded by commonsense as straining. It is to this patent and commonly recognised form that the names "treating", "changing", "moving" are generally applied.

If, however, we define straining as = being otherwise than what it is,[1] then, it is clear that, both veiling and unveiling and changing and moving in the latter form, are forms of straining. Even a rope appearing as a snake in illusion is strained if we put rope = rope-experience, and snake = snake-experience. It is only in so far as we distinguish the thing from Experience, and regard the former as being independent of the latter, that we can legitimately speak of the rope remaining unstrained or unchanged while it is being rightly or wrongly apprehended. That, pragmatically, and, from the finite Centre's point of view, the rope-thing *is* different from the rope-experience right or wrong, is undeniable. But actually, and from the standpoint of the Whole, Experience *is* Being and Being *is* Experience—a proposition not to be understood in the common idealistic way, since we have conceived Experience *not* as something mental or subjective only. Experience *of* a thing, and a thing *as*, and *in*, Experience do not mean the same thing. A block of stone lying there is taken as the thing; and my perception of it is taken as the experience of it. This is a pragmatically valid and useful distinction. But if

[1] Anyathā-bhāva.

we conceive experience as the Being-Fact of which the thing, as well as the perception and thought of it, are the two polar aspects, *in* which a number of apprehending and thinking Centres "bargain" with one another, or with a number of other Centres which, pragmatically, are not of a "mental" capacity; in which the latter kind of Centres also "bargain" with one another;—then, *such* Experience-Whole or Fact is not correctly described when it is stated to be either mental or material. The term "neutral" also is inadequate; since, the Fact *is* mental *and* material, subjective *and* objective. Subjective and objective are both *actual* Fact-sections or Fact-aspects; and it is "neutral" only in this sense that it *exceeds* (but not excludes) any of its sections or aspects.

Now, to resort to symbols for one moment, if Fact be = F and its included sections or aspects be A, B . . . (and we must take care not to restrict the Whole to two aspects *only*, though, from our point of view, two only may be conceivable; compare Spinoza's Absolute Substance with its "two" attributes of Thought and Extension)[1]; then, it is patent that each of the aspects has also its included features. Thus, A = S (x, y . . .), B = S (p, q . . .) where the letter S means sum or manifold. Then, evidently, F may be analytically put = S (x, y . . .) + S (p, q . . .) + . . . Be it noted that this is only an analytical equation which does *not* express the actual alogical wholeness of the Fact.

However, even granting this analytic statement, we find that any change, whether of the veiling and unveiling kind or of the making and unmaking kind, affecting any of the included elements (x, y . . . . p, q. . . .), will spell an immanent change in the Whole Fact itself; and if this be clear, then it is clear also that such change is an immanent straining of the Fact. Symbolically, if F = S (x, y . . .) + S (p, q. . . .)

[1] Spinoza, too, did not restrict the attributes of his Absolute Substance to two, as a careful consideration of the Texts will show.

$+ \ldots .,$ then $F' = S\ (x', y \ldots) + S\ (p', q, \ldots)$. The two F's are not absolutely the same.

An analytic statement is a statement in terms of thought; and it is, evidently, conditioned by the law of conceivability; in other words, in having to think and report about the Fact, we have no choice but to submit to the governance of the universe of thought and discourse. Fact may be, and often is *lived* without being thought and described. When it is thought and described it is still the Fact that is lived, but it is *not* the Whole alogical Fact that is thought and described.

However that be, it cannot be thought and described otherwise than as changing and straining, when in the Experience-Whole, inclusive of both subjective and objective aspects, immanent operations go on in the form of veiling and unveiling or in that of making and unmaking (i.e. patent, recognised changes of form and condition).

Now, there is one circumstance connected with this immanent stressing and straining of the Fact, which is deserving of special note: we refer to the fact that movements (in the wide sense before explained) go on in relation to "Centres". In other words, Experience-Whole appears to be "organised" about certain Centres within itself which together constitute a system of correlativity. The Whole is a continuum of Centres or Points (an idea to be later developed) which the Physicist, in view of his own special purpose, regards as a four-dimensional continuum of points, lending themselves, through other concepts ("interval", "separation" etc.), to a measuring and calculating treatment; but which *per se* and as a whole, may be *n*-dimensional for anything we know, offering its features to be defined in ways other than that in which the physicist may be now defining them. The physicist's relativity world may thus be a particular defining of the undefined Whole.

We shall devote a whole lecture to the study of Centres. Here be it noted that by "Centre" we do not exclusively

mean a conscious or self-conscious Centre such as has developed the Ego or "I". This, of course, is the most intimately known form. But it should be remembered that even a crystal or an organic cell has its nucleus; that even an atom of matter is believed to have a centre or core. Arrangement of the Fact-stuff (a term preferable to "Neutral Stuff") in and about Centres, is, therefore, too widely and plainly illustrated in the world-constitution to be ignored.

Now, the important point is this: Centrally-organised and Centre-referred being-experience is *ipso facto* a strained being-experience; to be organised about a Centre and refer to a Centre itself *means* straining. Thus when Æther becomes—whether by "miracle" or naturally—organised as a vortex-ring prime atom, or else as an electron or proton, it has subjected itself to stressing, and the consequence has been what we imagine as the vortex-ring. The same is essentially true in the vital and mental planes. Stressing in particular is accompanied by straining in particular; and in so far as the former is relatively permanent, the latter is also so. A Centre is just a relatively permanent and functionally efficient stressing-and-straining arrangement in the Experience-Being. It is a strain *sustained* by certain stresses; and one from which, and with reference to which, certain other stresses (and, therefore, consequent strains) are originated. Relative permanence and functional efficiency are, then, the two outstanding marks of the Centre.

Suppose we consider what becomes of Being-Experience when it is referred to a centre like *Me*. Suppose also that, for one moment, we split Being-Experience into its two halves—Being and Experience. Since Being is a universal category applying to both mental and extra-mental objects, both thought and thing, let us reduce the denotation of the term to extra-mental, "objective" things or "existents", when the separation has been made from Experience; the

term "experience" also, after the separation, means subjective consciousness. Thus a block of stone there is an existent or thing; and my perception and thought of it are its "experience" in the reduced sense of the term. Being-Experience included the thing and the thought: it had a thing-aspect and a thought-aspect.

Now, is the perception and thought of the stone affected by having reference to *Me* as a centre? It is easy to see that it is. My sense-capacity and thought-conditions are more or less peculiar; so that my sense-data and thought relating to the stone are also more or less peculiar; they are not *exactly* those of any other Centre. In this way, experiences of things *are* organised and strained about Centres. Experiencing, again, is not wholly or even mainly, a passive affair. It is mainly active. The Centre attends, selects and rejects, wills and determines its experiences. The sub-conscious tendencies or predispositions of the Centre have also a very considerable share in the making and shaping of its experiences.

In one word, a Centre, such as *Me*, *veils* and *treats* its experiences. Veiling is apparent when it attends to some features of its experience-manifold, and ignores other features. Then, also, its very constitution as a "finite" Centre—that is, a Centre of limitation and definition—requires that its focal and marginal experiences together should be of limited, though of indefinite, magnitude: so that, although I cannot definitely assign any limits to my total universe of experience at any moment and say precisely where my "fringe" loses itself into absolute non-experience, still I feel that it is *not* an infinite, unlimited universe of experience. Such feeling is a consciousness of veiling.

It is also patent that experience as it is organised about a Centre is largely constituted by the functional efficiency—working as subconscious predispositions or as conscious likes and dislikes, attentions and non-attentions of that Centre.

Experience of a Centre is not, therefore, simply "given"; it is largely "made". It is a process, a movement, in which the Centre plays the principal rôle. This circumstance we mean by using the term "treating".

Since the organising (veiling and treating) Centres are not identical, we have different forms of organised experience; and it is clear that these different forms can be arranged as an ascending and descending series if we compare them with reference to the degree of veiling, and unveiling, and a certain chosen standard of treating. Thus, a certain organised experience, A, may be more unveiled (with reference to the different forms of veiling explained above) than another, B; B more unveiled than C; and so on. Here A, B, C, . . . form a descending series in point of unveiling. Suppose, also, we decide upon a certain standard of correctness or rightness or desirableness as being applicable to the *treatment* of experience. A Centre, X, treats its experience in a way which we may, with reference to the chosen standard, pronounce as false, undesirable or ugly as compared with the way in which another Centre, Y, treats its experience which we pronounce to be true, good and beautiful. Evidently, in this way, the treatments of X, Y, Z . . . of their experiences, or those of X itself on different occasions, may be regarded as constituting a series involving higher and lower validity and value. In considering the two series as we have, for convenience, treated veiling and treating separately; but as was before pointed out, they are not actually separable from each other.

Next, let us turn to the things or "existents". Commonsense and common realism distinguish between the block of stone and the perception and thought of the block of stone. It is a distinction that we soon learn to make; and its psychology is interesting and ostensibly plain. Commonsense also regards the thing there as the cause of certain sensations in me: it is what gives me (I am, of course, active in the

process, in so far as I attend, select, emphasise, associate and co-ordinate) my sense-data. Now, *this* thing, the perceived and known cause and ground, of my sense-data, is certainly not unaffected by my veiling and treating functions. To put it symbolically, if veiling be, V, and treating be, T, and the thing there as known be O, then, O=f (V, T); that is, O varies as V and T vary.

To maintain this obvious relation is not to subscribe to idealism as it is commonly understood. We do not say that O is an idea or thought or even a complex of sense-data. It *is* there as the external cause and ground of our sense-data. But *how* is it there? As perceived and known by me, or as something *per se* unperceived and unknown. The latter alternative will drive us into what is called "Scientific Realism", or even into (once fashionable) Spencer's "Transfigured Realism" and Huxley's Agnosticism. But as we are not prepared —at least without further consideration and offering further resistance—to be so driven, we take the external thing to be the perceived and known thing—the thing that causes the perception and is revealed in it.

Now, this perceived thing (the "percept" as distinguished from the perception and the perceiver) *is* a *function* of both V and T of a given Centre. This, we maintain, is an obvious relation. Since, now, O varies as V and T of a Centre varies, we cannot have exactly the same O for different Centres, if their V and T are different; or even for the same Centre, if its V and T are different on different occasions. Symbolically, since V and T are of a Centre, we can put O = f (C), where C stands for any given Centre. This means that the object, O, varies as its apprehending Centre varies. Therefore, we must have $0' = f(C')$, $0'' = f(C'')$, $0''' = f(C''')$, and so on.

To maintain the variability of the object in relation to the variability of the subject is not to give up straightway realism

or even naive realism. It amounts to saying simply this: a drop of water seen by me with the naked eye is a different thing (as known, accepted and acted upon) from the *same* drop of water seen under the microscope. The attribute *same* suggests two things: that there is resemblance or partial identity between the "two" percepts; and that the drop of water also exists otherwise than as a variable or function of my V and T. These two suggestions are important, and we shall try to follow them up while discussing the position of Centres. Here it appears that as in the case of the experience of the thing we have a series constituted by the variability of different Centres' or the same Centre's V and T, so also in the case of the experienced thing itself, we have a series constituted likewise. This means that, with reference to different finite Centres, we have not absolutely the same experienced object; and that, in respect of 'veiling and unveiling' and with reference to a chosen standard of treatment, experienced objects (O′, O″, O‴...) can be constituted into a series of higher and lower value.

In this way, a drop of water as seen by the naked eye and as seen under the microscope are *two* things of which the latter stands, according to a chosen standard, higher in the series: it is a fuller and truer thing. But microscopes vary in their magnifying power; so we have still higher and higher—still fuller and truer—objects. Is it an unending series, or has it a supreme limit? If the latter, then we have the last term of the water-drop-series—the fullest and truest water-drop. *That* we may, if we choose, define as the absolute or standard water-drop. How shall we conceive it?

By splitting the alogical unity of Being-Experience into Thing *and* Experience, and studying each apart with reference to the V and T of different Centres, we have got two barrieses —the Thing-series and the Experience-or-Consciousness-series. Now let us blend together the two aspects or halves, and we

get Being-Experience again (inclusive of both thing and thought) which, as our analysis has shown above, posits itself as a series with reference to the varying V and T of different Centres. We shall now start from this position.

Theoretically at all events, both V and T (or M = Movement) may be made to approach indefinitely near to zero or to infinity. If the negative of veiling be unveiling, revealing or Presentation (= P), then, it is clear that the limit, when V = 0 (zero), is P = infinity. (P = the inverse of V = 1/V; ∴ P = 1/V = 1/0 = "infinity".) Or, we may put the result thus: Lt. V = 0, F = "infinite" F; which means, Fact or any section of Fact becomes infinitely presented or revealed, when the veil incidental to it is made to absolutely vanish. On the other hand, when the veil becomes infinitely great, presentation vanishes, or we have no presentation. Does the block of stone in itself represent this condition? We shall see.

Again, if the opposite or inverse of T (Tension or Movement) be Quiescence (= Q), then we readily perceive that the condition of Being-Experience when T in it is reduced to zero, is a condition of absolute quiescence: It becomes a perfectly unchanged and unmoving Being-Experience. On the other hand, if T be made to approach infinity, we have quiescence gradually vanishing, and *in the limit*, pure and absolute change such as will delight the heart of an Heraclitus of old or a Bergson of to-day. We do not, however, here discuss whether absolute quiescence or absolute motion is possible or impossible.

Now, returning to the aspect of consciousness, we recognise that immediate experience (or what Bertrand Russell would call "Knowledge by acquaintance") is more clearly and emphatically an experience of quiescence and less clearly and emphatically an experience of tension or movement. Even an immediate experience of movement bears a character of rest or quiescence. On the other hand, all discursive

experience (which Bertrand Russell would call "Knowledge by description") is, as the name itself implies, an experience bearing emphatically a character of tension. Commonly, however, immediate experience is never absolutely and purely immediate; it involves more or less an admixture of discursive or "descriptive" thought. So, on the other hand, discursive experience is never, commonly, absolutely and purely discursive: it involves more or less immediate elements.

Hence we have a series here also; one limit of the series being an immediate experience in which the discursive element has totally vanished; the other limit (assuming that it be a possible one) being a discursive thought in which the immediately given element has altogether vanished. Of these two, the former represents a possible and conceivable condition—an immediate experience of Fact only with no judging, conceiving, classifying and inferring movement in it.[1] The latter does not seem to be a possible or conceivable condition. We may be supposed to move in a universe of pure universals—the heaven of Platonic Ideas—and, apart from the particulars of sense-data, may trace and follow up their implications, as for instance, the pure mathematician is supposed to do. But even in this case, (1) the premises themselves, particularly the axioms and postulates, are immediately known, and, (2) the total discursive process involving the deductive steps is also immediately known—that is, while thought moves from step to step in the discursive process, the *fact* that it has altogether moved thus and thus far, is immediately known.

Now, returning to the former condition of immediate experience in which the discursive element has been supposed to vanish, we at once recognise that the vanishing of discursive or descriptive thought means the elimination of the instruments of such thought-concepts or categories. In other

[1] Cf. Nirvikalpaka Jñāna.

words, in an absolutely immediate experience, not only the categories of understanding, but also the forms of sensibility, will cease to operate as forms and categories. This means not that space, time, causal relation, and so forth, cease to be in the immediate experience, but they will cease to operate as actual thought-forms and categories: an immediate experience will not *think* itself in space, in time and in causal relation. But, conceivably, there may be cases, too, in which an immediate experience will be free from every determination: it will not only eschew the *thought* of space, time and causal relation. We shall later consider whether there may be such cases. But, be it noted here, that experience does not cease to be immediate because it involves an experience (as distinguished from discursive thought) of space, time and causal relation.

In fact, an immediate experience and a discursive experience need not necessarily differ as regards the content of experience: both may have the same sort of content—things and relations, terms and propositions. But whereas in the first, the whole content is apprehended in its alogical unity, in the second, the content is analysed into its "constituents", and these are consciously linked up with and again disjoined from one another. It is this linking up and disjoining of constituents according to certain "senses" or "directions" (as Bertrand Russell happily calls them), which raises the question of the truth and falsehood of the judgments etc. Immediate experience or knowledge of acquaintance *as such* simply is or subsists; it is neither true nor false. Discursive thought "treating" the constituents in certain "senses" or directions naturally raises the question whether the "senses" in which the constituents have been treated do or do not correspond with the facts; and this is the question of truth. To this important question of truth we shall return in another lecture.

There is another feature of the case on which we desire to lay some emphasis. An immediate experience may be there which involves no discursive thought—such as judging, classifying and inferring; but a consciousness which does involve such discursive thought is, as a whole, that is as exceeding the marked, dissected and dressed up fragments in it, an immediate and alogical consciousness. In other words, the discursive thought is a Fact-section, and the section is never without the whole which is immediately given.

Now, both V and T are forms of straining, as we have seen. If both V and T be reduced to zero, we have infinite, unlimited, unmeasured presentation, and perfect, absolute quiescence or rest. With reference to Being-Experience or Fact, three cases are conceivable:

I. Being-Experience is purged of all form-content, and reduced to pure, featureless, formless Being-Experience; such Experience is pure consciousness, and therefore, no veil is incidental to it; it has no constituents, and, therefore, no treatment or straining is possible to it. But, nevertheless, it is *not* the Whole Fact, since by hypothesis, we eliminated every form-determination[1] from it. With reference to this Whole, therefore, it is a veiled experience; it is an aspect of the Whole. The question of reality or unreality relating to the form determinations (the "manifold") does not here arise. In accordance with a certain chosen definition of "reality", the Pure Consciousness may be real and the manifold given in it, but subtracted from it, unreal. But this does not affect the position that the Whole or the Fact has been veiled when we confine ourselves to Pure Consciousness (in the sense explained above).

II. On the other hand, if we take the Whole—the infinite manifold, and fail to differentiate the modes of consciousness from Consciousness as such (which we commonly

[1] Viśeṣa, avaccedaka.

fail to do—for reasons we shall later explain), then also, the Whole is veiled in so far as the aspect of Pure Consciousness is concerned; for, as we shall later explain, the manifold, unboundedly vast as it is, never exists except in a Continuum or Æther of Consciousness which is, commonly, practically ignored.

Then, as regards the factor T (Movement) we ask: are the constituents of the manifold moving or at rest? If moving, then T is not $=0$. It will not do to urge that though the constituents severally or distributively move, they collectively maintain equilibrium. For though that may be a conceivable case, there is a difference between the constituents A, B, C, D . . . not moving at all, and the constituents severally moving but not moving collectively. Only in the former case can T be put as zero absolutely. Hence we conclude that both I and II are incomplete cases of $V=0$ and $T=0$.

Let us now try to imagine what the complete case will be like.

III. If by the complete case we mean an all-inclusive Being-Experience, absolutely full and whole, then we must conceive it (we are giving an analytic description of what is alogical) as one *in which V and T have vanished as well as have remained.* That is to say, it must have a revealing or manifesting aspect subject to no limiting conditions ($\therefore V=0$), and which as such is absolutely strainless and unchanging ($\therefore T=0$);[1] and it must have another aspect in which it evolves as a system of correlated Centres with their infinitely diverse veilings and changings. The latter aspect divorced from the former gives us but one half of the Whole; and so does the former taken by itself. The Absolute Being-Experience is, therefore, an Experience (=Being) which evolves by its own Stress or Power into an universe of diversely veiling and moving Centres,[2] and which yet remains an absolutely

[1] Prakāśa=Sarvābhāsaka=Akṣara-nitya.

[2] Kṣara=Jagat=Prapañca.

veilless and strainless Consciousness revealing Itself and its own stressing and straining as a universe of correlated Centres. Thus It is not = a mere aggregate of the diversely veiling and energising Centres; It includes this universe but exceeds it. Again, It is *not* = any one of these Centres *as* Centres. Though Centres, according to their degrees of veiling and treating are in a series which suggests a Supreme Centre (a suggestion to be later studied), we must observe that the Whole is *not* = the Supreme Centre, the last term of the Centres-series. Negation in all these cases is to be understood not in the sense of exclusion, but in this that the Whole exceeds [1] all such characterizations or definitions.

Lastly, the whole is *not* the pure revealing aspect only—the aspect that reveals itself, and, without the least reservation, reveals the entire universe of correlated Centres, their multifarious stressings and strainings. Here also negation is not exclusion.[2] The term "transcendental" is generally applied to something transcending or going beyond the sensible, phenomenal, pragmatic, empirical order. Some of these latter terms require to be re-understood from our point of view. It is clear, however, that if we are to regard "transcendental" as something lying beyond the pragmatic order, then the Whole we are here conceiving is not "transcendental." The aspect of pure and unconditioned revelation may be called transcendental, not in the sense that it possesses a separate Experience-Being, but in this that it distinguishes itself from the totality of objects revealed, and is not = the totality of such objects.

Now, from a given (finite) Centre's standpoint—a veiling and treating standpoint it necessarily is—the totality of objects (or the totality of Subject-Centres and Object-Centres) is a universe of many layers, of which three are broadly distinguishable. First, there is the external, sensible or perceptible (including what is mentally perceptible) layer.[3]

[1] Atireka, atiśaya. [2] Niṣedha. [3] Sthūla.

This is the gross universe. Behind this is the universe of finer and still finer elements ("physical" as well as psychic).[1] As for Centres of different normal apprehending capacities, we have various grades of the gross universe itself (*e. g.* we with a pair of eyes and insects with half a dozen differently constituted eyes do not live exactly in the same gross universe), so, relatively to different 'abnormal' or extra-ordinary apprehending capacities we have various grades of the subtle universe. The telescope and the microscope, the microphone and megaphone, and so forth, with their varying capacities, reveal to us many grades of the subtle universe. The world of microbes, for instance, is a grade of the subtle universe. New grades are being discovered with the gradual extension of our apprehending capacity. Such extension need not be confined to the scientist's laboratory only: what is called "X-ray vision", "psychometry", and so forth, may be such extension of the bounds of man's knowing capacity—and this parapsychic power may be cultivated as near to perfection as may be desired.

However that be, let us turn now to the third or innermost layer. An object gives me a complex of sense-data at the level of normal experience; it gives me more and more detailed and complex sense-data as I go deeper into levels of "physical" and "paraphysical" subtle observation. But I am strongly persuaded (all the sceptical arguments of Hume and others notwithstanding) that the object *at bottom* or in the last analysis, is a system of stresses (that is a stressing Centre) which interacting with another such Centre (myself, including my nervous mechanism) has caused these complexes of sense-data, gross or fine.

This need not necessarily mean that the "physical object" is, in itself, unknown and unknowable. It simply means—and our experience does not warrant us to go further

[1] Sūkṣma.

than this—that, while it shows various gross or fine sense-complex "bodies" to different Centres or to the same Centre under different circumstances, it has a radical "stress-body" also; and that, further, if there be a Supreme Centre in which apprehending capacities reach their perfection, then, with respect to that Centre, the thing has an absolute "sensible-body" also. The "stress body" and the "sense-body" last mentioned inseparably co-exist; they are but the two facets of the same being or Centre. We have relative apprehensions of the stress-body and sense-body of the thing, and apprehensions constitute a series as we have seen. These relative apprehensions are not "unreal appearances" or "illusions." They are segments made, with the special instruments with which special Centres are provided, from the absolutely real or existent. Thus to use T. H. Green's expression—a given Centre's experience of things "is a gradual and partial reproduction" of the absolute experience of the Supreme Centre.

Thus we have three orders or layers in the Universe of Centres; the gross, the subtle and the causal or radical.[1] Of these the first two are of different grades and vary from Centre to Centre. Whether the radix (stress-body with its associate [2] sense-body) remains or does not remain eternally unchanged—whether, in other words, these radices constitute an absolutely fixed framework for our variously changing and shifting universes is a difficult question into which we do not propose to go now. But this much we can here assert with confidence—that relatively to our changing and shifting universe, the universe of radices or roots or prototypes *does* constitute a fixed framework; so that *for all practical purposes*, it may be regarded as an absolutely fixed framework. It is the "causal skeleton."

[1] Kāraṇa.

[2] The relation is one of Tādātmya.

To resort to symbols again: in regard to what we have before called the transcendental aspect of Being-Experience,—Pure and Perfect Manifestation or Consciousness—the factor T (Tension) or M (Movement) may be easily supposed to have vanished. In it we reach the level of perfect quiescence (Q) or rest. *Logically*, pure quiescence like pure motion is unthinkable; and we shall in another connection restate the proposition that Pure Consciousness as pure quiescence involves contradiction, logically considered. But we are not so considering it now. In experience, the aspect of pure Consciousness represents the level of perfect quiescence. Does it *alone* represent that level?

The General Stress or Power by which Being-Experience or Fact both *is* pure Consciousness and *becomes* a universe of Centres—radical subtle and gross—, the *Activity* of Being and Becoming as such, is also quiescent in the sense of being permanent or eternal. We have distinguished between Being-activity and Becoming-activity; and by "activity" we mean not any kind of "mysterious influence", but simply the fact that Experience-Whole *is* and *becomes* variously related "Centre-Experience"; and that this fact of being and becoming is fundamental. The relation of Experience-Whole to its Activity is one of identity.[1]

It is in analysis that we must speak of Experience, its activity or stress, and its being and becoming. In Experience itself these fuse into an alogical unity. So also in the case of the differentiation between Experience as pure revelation or illumination, and Experience as stressing and straining. Experience as the former, stresses and strains to become an Experience of universe; and Experience as the latter manifests itself (fully in the case where $V=0$), and partially where $V=$something positive, while it stresses and strains. There

[1] Tādātmya.

also the relation is one of identity.[1] We shall, however, revert to these relations later on.

Now, if in respect of "Pure Illumination" (unveiled perfect manifestation), we put T or M = 0, we have in this an absolutely unchanged aspect or "plane" of Being-Experience. It is *Akṣara*.[2] Then, as we have pointed out, the Activity of Being-Experience to-be-and-to-become *as such* (that is, as distinguished from its several components and modes) is also *Akṣara*. Since Being-Experience is never without the Activity-to-be-and-become. Then subordinate to this plane of the *Akṣara*, we have the universe of radices or roots—the causal skeleton or framework of our changing and shifting universes of experience. This, too, is, relatively speaking at least, *Akṣara*. And once we introduce the conception of degree, we may have different grades of *Akṣara*, as likewise we may have different grades of continua and infinitesimals. Lastly, come the apparently changing and shifting universes themselves, constituting the *Kṣara*.

These universes can be considered with respect to the apprehending Centres, taken either distributively or collectively. If we conceive a Universal Centre of which all "finite" Centres are particulars—the Universal being, therefore, not merely the aggregate of the particulars—then, the three orders of universe before explained—gross, subtle and causal—may be considered either from the Universal's point of view or from the point of view of the particulars. In other words, Being-Experience, in its gross aspect may be Universal (referred to a Universal Centre) or may be Particular. So also in the cases of the other two aspects. These Universals and Particulars will come up again when we come to deal especially with the question of the Centres. Here we may only note in passing

[1] Tādātmya, Sāmarasya.

[2] See *Bṛhadāraṇyaka Up.*, III. 8. 11; *Katha Up.*, I. 2. 16; *Śvetāśvatara Up.*, I. 7, 8, 10; and elsewhere.

that the three orders of Universal thus obtained are not mutually exclusive, but that the subtle Universal includes the gross Universal and exceeds it, and the causal Universal includes the subtle Universal and exceeds it.[1]

The Causal Universal Being-Experience, technically called *Īśvara* or the Lord in Vedānta, includes the beings and experiences (we now put them separately) of all subtle and gross Centres, whether these be considered universally or particularly. And It exceeds all such Centres inasmuch as It is their causal background and experience of that causal background (here again we are putting being and experience separately.)

We may put the relation in another way. Since the Whole Being-Experience is alogical, it cannot be, in its wholeness, described either as cause or as effect, either as ground or as consequence. But as soon as the causal concept is introduced, and we think of Being-Experience in terms of it, we have to distinguish between Being-Experience as Cause and Being-Experience as Effect.[2]

This is not to say with Kant and his followers that the "Thing-in-itself" of Being-Experience is neither cause nor effect, and that it is only our thought or understanding which, applying its innate forms, makes it appear so. Being-Experience-Whole by Its own immanent activity has evolved as Centre-referred universes, universal and particular, and as such universes It thinks that a part of Itself is cause and another part effect; so that that thought is perfectly valid so far as thought goes.

The point is that Its Whole Being-Experience is not *exhaustibly* covered by such thought-concepts as cause and

[1] *Cf.* the relations of Virāt-Hiraṇyagarbha-Īśvara; Viśva-Taijasa-Prājña (in the *Māṇḍukya Up.*, and *Kārikā*). See also the discussion of these in Sir John Woodroffe's *Garland of Letters*, Chap. V.

[2] Kāraṇa-Brahman and Kārya-Brahman.

effect; it exceeds the realm of Being-Experience thus defined. And this is not the same thing as saying that cause and effect is a subjective category only, having no applicability to the "Thing-in-itself". The Vedānta recognises no unknowable "Thing-in-itself" or "Things-in-themselves". Its Being is identical with Experience; and this Being-Experience is neither "subjective" nor "objective". Particular Centres in It live and know It in a pragmatically fragmentary way; but they yet live It and know It truly, so far as their living and knowing of It goes. The Highest Universal Centre—the Summum Genus—lives and knows It actually fully.

But even in this latter case, we must make one reservation. If we imagine that in the Universal Centre, there is discursive knowledge or logical thinking (the sequel relating to the "Continuum-Point" will exhibit what grounds there may be for such assumption), then, we must think that Its logical thinking, perfect though it be, is yet inadequate to express the fullness of the alogical Being-Experience. We may conceive logic being perfect; but we cannot conceive logic becoming its own contradictory or negation—alogical.

Being-Experience-Whole or Fact is either logical or alogical. If the former, then it merely *seems* to be alogical to the finite Centres whose logic is imperfect; so that, to a Perfect Centre and perfect logic, the appearance of alogicality in Being-Experience vanishes, and the dream of Hegel and others about a perfectly rounded logical Absolute Being-concept is realized. But if, on the other hand, the Fact be really alogical, then we must think that even to perfect logic It will not absolutely cease to be so. Now, starting on the basis of our own being-experience as it is intuitively given, we have found that it is more likely that Being-Experience-Whole as such is alogical than that It is logical; that the logical movement is only immanent in the intuitive Whole:

and that while the logical movement may well be conceived to proceed apace both intensively and extensively, it does not seem likely that the range of its applicability will ever be co-extensive with the Whole itself—leaving no residual or marginal alogicality. This is an aspect of the question upon which we dwelt at some length before.

The following statement of the Lord's Experience, therefore, seems to be justified from our point of view: (1) It knows the Whole as Whole, and, therefore, as alogical in its wholeness; (2) It knows the universe of co-ordinated Centres in the Whole with the three orders of causal, subtle and gross, and such knowledge is perfectly logical—perfect to the utmost reach of logicality; (3) the above knowledge is of universals as well as of particulars; it includes (but exceeds) the knowledge or experience, both intuitive and discursive, of all subordinate Centres.[1]

Hence, with respect to this Highest Centre, when we put $V=0$, we are to understand *not* that the veil has vanished with respect to all subordinate Centres making their experiences fully patent also, but that the Highest Centre possesses an unveiled experience of the Whole—which means that It possesses an unveiled experience of the alogical Whole in which subordinate Centres have their variously veiled and treated experiences. To deprive the Highest Centre experience of the detailed experiences of the subordinate Centre is, obviously, to make Its experience poorer by so much, and, therefore, not perfect experience. The Lord has, thus, an unveiled experience of the veiled experiences. This, from the other side, may be expressed by saying that we have veiled and "treated" experience of the unveiled experience of the Lord: which gives us, for instance, the substance of Berkeley's and Green's teaching, if we care to put certain constructions on our terms.

[1] Sarvajña and Sarva-vit. See *Muṇḍaka Up.*, I. i. 9.

Similarly, if we put T or M=0 with respect to the Highest Centre, we have *not* this, that T or M in the subordinate Centres, or in three orders (causal, subtle and gross) of universe, vanishes, but only this: that the Highest Centre, while moving as such universe of correlated Centres, has Its Being-Experience remaining perfectly quiescent as (1) Pure Consciousness before spoken of, and (2) Activity-or-Power-to-be-and-become *as such* (also spoken of before)—that is, as distinguished from its special conditions and modes. The "causal skeleton" also may be conceived as remaining relatively fixed through all movings and strainings. We do not here discuss whether the distributive movements and strains of the subordinate beings neutralize one another in the resultant, thus giving M=0 on the whole. It is a question on which some light may be thrown in another connexion.

Nor do we discuss here whether, appropriately, the Highest Centre should be called a "Centre." Pending a definition of "Centre", the term as applied to the Being here conceived may be taken as but a provisional designation. The sequel will show if this be the correct one.

Now, throughout all this discussion, we have been preparing ourselves for a definition of "Intuition." We started from the "provisional" Fact—the continuum of Being-Experience as immediately presented to a given Centre. We saw that such Fact involves what we called "Elasticity"—that is, a relation of stressing and straining. Straining (change of form and condition) was found to be of two kinds—veiling and treating, in which latter, movement is more emphatic. The Stress or Activity underlying the process has rendered both veiling and treating variable, admitting of degrees and grades. In other words, we had series suggesting limits either way. This led us to consider our Facts as "functions" of the two variables V and T (or M).

Then, in the course of gradually making the two variables (V and T) evanescent in the Fact or Being-Experience, we got the three orders of universe, causal, subtle and gross, and finally, arrived at a level at which (1) all Being-Experience (subsuming the variously veiling and treating Centres) stands perfectly unveiled or revealed; (2) with the alogicality of the Whole being fully apprehended; (3) with the logicality of the included universes being perfectly known; (4) with absolute quiescence being perfectly apprehended as the "Æther of Pure Consciousness" (to which we revert in another lecture); (5) with absolute permanence or persistence of Activity-to-be-and-become being also perfectly apprehended; and (6) with the (possible) persistence of the "causal skeleton" of the subtle and gross universes being also perfectly known.

Now, leaving aside the question as to whether there may be a discursive element or aspect in this Supreme Experience, whether the Lord knows the logical order perfectly ratiocinatively or perfectly intuitively or bothwise—we may perhaps justly assert that in reaching this level we reach also the highest level of intuition. In other words, in this the straining of the Centre-referred Fact, both in respect of veiling and of treating, is brought to the point of evanescence: which means that here Fact experiences Itself as perfectly unstrained, though this experience may experience the varied strainings of the pragmatically "finite" Centres involved in It. In *this* sense we may regard this level as strainless Being-Experience. If strain (S) be the function of V and $T = f(V, T)$, then, here $S = 0$; which as we have found, does *not* mean the S's of the individual Centres vanishing or the Supreme Experience not apprehending the S's of the individual Centres.

VI

MATTER AND FORM

LOOKING out of the window I see before me a landscape serene and picturesque in the November afternoon. A north-westerly wind is whistling and rustling through a grove of tress. There are other notes, too, to make up the unobtrusive chorus of the woodland and the meadow. These two, objects of shape and colour and vocal things, are now the main streams which commingle to form my immediate experience of the moment. But doubtless there are subsidiary streams also pouring themselves into the sea of Experience. I refer to smells, touches, tastes and so on. But these, indefinably immense though they be in their aggregate, are not all that I have or I am. Various undiscriminated organic sensations are also there in the whole. But even these do not cover the whole. If the view of the celebrated author of *Institutes of Metaphysic* (written nearly three-quarters of a century ago) regarding the self or ego occupying the very centre of all experience be accepted—and I think a great deal might be said in favour of this view—then, self-consciousness also necessarily enters into the fabric of every experience, whether the self be there in the area of focal attention or not. He maintains that the self or subject must be interwoven with the object, so that there may be a fact of experience for us at all —that experience is never an experience of object or matter as such or *per se*, but it is the cognition of a relation of unity in which both the subject and object enter simultaneously

as partners. As I have already said, there is a substantial element of truth, genuine and flawless, given in this position, which, though fashioned by logic out of the crude mass of intuitive mother experience, may not altogether be disowned by intuition itself. But let us not pause to examine this.

But though the self or ego as such being there as co-efficient or co-determinant of experience may possibly be doubted as a piece of first-hand information *prima facie* valid, it cannot be doubted for one moment that the experience-whole is *not* exactly or even adequately summed up by the analytic description that we have so far given of it. The fringe or outlying vistas of semi-consciousness undoubtedly is there that refuses to cross, unless the attentive self sends its special invitation to do so, the borderline which separates the describable from the indescribable, definable from the indefinable in the world of experience. But turning our gaze from the misty borderland back to the universe of things and events that have already become lucent and patent, we find that it is not so easy to render a complete account even of this defined universe in terms of the actually felt and noted sights and sounds and smells as one might be inclined to imagine.

The naked eye or the telescope reveals to us the glories and terrors of the firmament, but those that are so revealed constitute only a part—and it may be a very small part—of the untold myriads that actually exist. At a particular moment, only a few of those that are actually revealed fall within the focal area of the search-light of the observer's attention; the rest are only dimly apprehended. The same is generally true of every actual experience that we may have at any moment. The astronomer's chart of the heavens is prepared after a great deal of laborious computation; the photographic plate, properly exposed, may give us a picture of the heavens more easily and directly; but the photographic

plate is not the astronomer's sense-apparatus and mind. The latter can, of course, apprehend a vast multitude of stars, but its apprehending capacity is limited in at least three ways—it is limited, firstly, by the realm of the unexplored; it is limited, secondly, by the circumstance of its attention seizing upon only a few features at a time and ignoring more or less the rest; and, in consequence of these, it is limited, thirdly, by the necessity of its having to turn the outflow of attention successively in upon different realms of the experience manifold, and thereby, define and compute the different features by a long, laborious, serial process.

In accordance with the analysis of the Fact we have given in the preceding lectures, we may conceive that this three-fold limitation is an illustration in detail of the working of the Principle of Limitation found to be fundamentally operative in Experience. That Principle appears, firstly, to divide the Whole into the known and the unknown, the felt and the unfelt. Then, secondly, to divide the known or felt into the dimly known (or "fringe") and the distinctly known (what is, pragmatically our perception). And divisions made by the Limiting Principle are not abrupt and precipitous: within each broad division we have transitions or shades as we have in the colours of the rainbow. In other words, the Limiting Principle is responsible for the grades of intensity etc. that render the features of our experience quantitatively serial in their relations. This Principle is, therefore, the root as well as the expression of all the quantitative diversities in our experience. It is that which 'informs' what may be formless in itself.

And whether or not we subscribe to the old Pythagorean doctrine of Number informing or formulating Matter or Nature *per se* which is formless, or to the modern doctrine of Kant and others contrasting the 'form' of experience with

its 'matter', it is undeniable that there is a principle or Law operative in experience which makes our consciousness diverse in point of distinctness, in intensity and other respects. By this Principle we do not merely mean the fact that our consciousness as distributed over the whole field of experience may be clearer here than there, more intense here than there, and so on. By this Principle we refer to the causal apparatus which makes such a diversity in consciousness possible. Common Psychology would seek that causal apparatus, or the principal and "immediately antecedent" portion of it, in the mechanism of response between the nervous system and environmental stimuli; and one may be prepared to grant that it did not seek altogether in vain. But in dealing with the Fact or Experience-whole which includes all *being* and *knowing*, we cannot go contented with an explanation that apparently touches only an isolated region of phenomena, so long as our object is to discover some fundamental formula that will cover, if not explain, all.

Now, impelled by this inner impetus, we may trace not only the diversity in quantity but also that in quality to a Measuring Principle, which as we have found, is immanently operative in experience. It is this Principle which makes the distribution of consciousness varied as regards distinctness and intensity; it is also this that makes the content of experience varied in quantity as well as quality. It is true that Science attempts to reduce qualitative differences to quantitative ones; for example, the difference between red and green in perception is sought to be explained by the difference in the wave-lengths of light vibrations and by similar other extra-mental agencies. But it is clear that this causal theory of perception explains, but not explains away, the qualitative difference between red and green.

Science traces a causal chain, at the near end of which are all the qualitative differences that we actually perceive;

but the farther end of which stretches into a mystery which, to quote the words of Hume that have become classical, "our line is too short to fathom." Science is exploring farther and farther into the depths of this abyss of nescience in order to discover, if possible, the farther end of the causal chain, and it is undeniable that she has made some arduous but real progress; but her progress in this line is bound to be in the nature of an asymptotic approximation; and, to the wildest fancy it does not seem credible that she will ever actually reach the *fundamentum ultimum* she is in quest of.

But not to talk of this consummation of the dreams and hopes of Science, it does not at all appear that at any stage of her progress towards the goal she has, or is likely to have, come across a picture of the causal apparatus of the world which is an apparatus of number and magnitude only—of pure forms or measures empty of all qualitative content. In fact, so far as our analysis of the cause-and-effect system goes, we find that form invariably co-exists with content, quantity with quality. And if any presumption is to be based upon this evidence as to the ultimate constitution of the Universe,—as to the farther end of the causal chain lost in mystery to which we have referred,—then, it is this: the ultimate ground or cause is not pure form only, nor, on the other hand, pure matter only but it is form and matter combined, quantity and quality joined together in alogical unity.

And, if it be our object to find a world-formula that will cover both, our object cannot be attained if we restrict the Stress or impetus in the Fact or Experience-whole to one aspect only. It will not do to say that the Stress evolves and "informs" the structure only of the universe, and that it finds the stuff or material of the universe, ready at hand offering itself to be fashioned and informed. In other words, it will not do to conceive any kind of division of labour between the Stress and the Stuff in the Fact: that content and

quality come from the Stuff and form and quantity come from the Stress.

There is no compelling or "sufficient" reason to suppose that the one is the material and the other the efficient cause of the world. There is no ground for maintaining a dualistic position like this. In fact, it is our inveterate habit of analytic and abstract thinking that is responsible for such dissecting and hypostatising of form and content, of quantity and quality, of material cause and efficient cause. Actually form and content, quantity and quality, material cause and efficient cause *as cause* cannot be isolated from each other, and so set up that the one can function independently of the other.

The alogical unity of form and content is an immediate deliverance of experience; and it will not do to treat this deliverance as if it were chimerical, or even as inconsequential. "Natural thinking" gives us no guarantee that its subject matter is self-evidently real because the thought of it is "natural"; but still natural thinking may, at some essential points, actually touch the "live wire" of the real and the true. The alogical unity of matter and form, of which we have just spoken, is a direct deliverance of all actual *experience*, whatever the verdict of natural thinking upon it may happen to be. And it should never be forgotten that actual experience is one thing, and the thinking of experience, natural or otherwise, is another. In the present case, however, the deliverance of experience and the verdict of natural thinking will probably concur. The plain man will not, for example, set up the tone and quality of his experience as a separate category, and the degree and intensity of his experience as another. For him the two invariably co-exist, and they cannot be divorced from each other either in perception or in explanation. It is unlikely to him that the one has its root where the other has not its root also.

For three reasons, therefore, we trace a common root for both the formal and the material content of our experience. Of these the principal one is this: in actual exprience, the two are found together in alogical unity, and though, abstract thinking may separate the one from the other, and though, as we shall later see, the "Pure Æther" of Consciousness may be *purely realizable*, it does not follow that they have or may have separate beings or separate origins. In all abstract sciences, such as geometry, we have got to "limit" our actual data and deal in abstractions. For example, Euclid's definition of a line is—"length without breadth". No actual object of experience satisfies this definition; but still it may be possible to attend to the length only of a thing ignoring for the time being its two other dimensions. In Metageometry or Non-Euclidean Geometry, many concepts of ordinary Euclidean Geometry are derivable as "the limiting cases" from more comprehensive concepts involving "series" of cases, some of which are "transcendental". *E.g.*, The "paraspheres" (Lobatschewsky's horospheres) in Plane Trigonometry are the limiting case of "hyperspheres" in the Non-Euclidean passing into "spheres" of Spherical Trigonometry. It is not only in Pure Mathematics that we deal with pure concepts which have no analogues in actual experience. Even in Mixed Mathematics and Physical Science we have to deal with concepts that are more or less abstract. This is what is meant by saying that these sciences proceed by "limitation of the data". It is evident that even the so-called concrete sciences, to be possible as *science*, must more or less limit the actual data.

Psychology, which is directly concerned with the way of experience, cannot possibly 'manage' experience as one actually lives it. The actual fact of experience, as immediately given, is dumb and alogical, and absolutely refuses to be photographed or reported upon. A 'snap-shot' photograph of

the Fact can of course be taken, and, whether the fact reports itself to us or not, such snap-shot views are often being taken. Standing on the sea-beach I may be now looking at a special array of billows and breakers; but a view of the wider expanse or 'setting' of the sea, of which the advancing and retreating billows and breakers are special and local delineations, certainly breaks in upon my consciousness whenever my attention is not bound too fast to the objects of special interest. In fact, the actual experience seems to "play hide and seek" with itself, so to say: the sea now offers a few of its features to my special interest and regard, and withdraws itself under a cover or veil; and then, at the next moment, the veil or cover is thrown back, and the vast and immense blue of "rolling deep" stands revealed to me. This circumstance of the alternate veiling and revealing of the sea—its going behind the screen while I am especially engaged to some billows and breakers, and its appearance on the stage whenever my attention may be indifferently engaged or "nodding"—is one that is patent to the "snap-shot" view of which I have spoken. This snap-shot view is Intuition. In this we are at home with ourselves—that is with the Fact or Experience-whole. But of this immediate and concrete fact of experience Psychology does not speak; it cannot speak. Because in it the universe of discourse is not yet. Even where a universe of discourse is there in it, it is larger than or exceeds that universe. It is clear, therefore, that even Psychology as a science is not quite at home with the Fact.

Psychology must analyse, define and classify, or it is nowhere. For Psychology, therefore, sensations and perceptions, ideas and inferences, emotions and volitions are separable in this sense that they are defined and investigated apart, although in actual live experience these elements, without being defined and thought about as such, constitute an alogical and unspeakable unity. Epistemology goes or attempts

to go some steps farther than Psychology: it is to this branch of Metaphysic that we owe such prized refinements and curiosities as the distinction between "form" and the "matter" of experience, that between *a priori* and *a posteriori* elements in experience, that between the 'manifold' of an experience and "the unity of the transcendental Ego", and so on. We do not for one moment suggest that the crude elements of psychology and the refined elements of epistemology are but 'pure cobweb and moonshine--' that those elements, crude or refined, are not there in experience at all. In fact, in trying to define and think about experience, we *must*, in a fashion, cut up the Experience-whole, and obtain certain, no matter what, elements crude or polished. And it is needless to say that the thinking of an experience is just as natural and necessary an act as experiencing itself. In fact, thinking of an experience is not outside experience; it is a *mode* of experience. It is a mode in which Experience-whole is veiled and treated in a fashion; and this circumstance we have before called the *straining* of the Fact. The straining presupposes stressing or activity. This means that when we think of our experience, an activity or movement seems to be in evidence in the midst of that experience whereby that experience, alogical and undefined in itself, becomes or tends to become a thought-system - a universe of discourse. Or, if we must eschew all phraseology suggesting or scenting of mysterious agencies tabooed since the days of Hume, we may say that the tendency of experience becoming a thought-system or universe of discourse is the *expression* of the movement in experience. However, it is to this distinction that we desire to call attention pointedly: we do not form any judgment as to the validity or contingency of the strain—the thought-system or the universe of discourse in the making.

This is the first and foremost reason why a common root for the 'matter' and 'form' of experience has to be searched

for. In experience, apart from the universe of discourse, there is a seamless texture of matter and form, of quality and quantity. And, though in thought, and particulary in logical understanding, we must abstract the one from the other, and, then, so far as possible, try to correlate the one with the other, yet it should never be forgotten that with reference to *actual* experience, abstractions are abstractions, and we have no title from actual experience to hypostatize them. This is not to deny them a title to being or reality. A "heaven" of pure Forms and Ideas may exist, but it exists not in experience such as we have it, but in rarefied and etherealized experience like, perhaps, the X-ray in the rarefied tube.

By 'rarefied experience' we mean an experience—if experience it be—purged of all actual, concrete, particularized content. Since we have not identified reality and concrete experience such as we have it with each other, or made them absolutely coincident with each other, we are not bound to banish pure forms and ideas into the realm of "cob-web and moon-shine." All experiences *are*; ideas or thoughts about experience *are*; even fancies and abstractions *are*. *Being* is the common birth-right of all. The distinction between reality and unreality, as we shall see more fully later on, is a pragmatic distinction which does not affect *Being as such*. There can be no doubt, therefore, that a system of pure forms and ideas is or exists. And this fact should not be confounded with the issue whether they be real or unreal. Since reality as distinguished from being as such, belongs to the pragmatic order, it is a category that does not apply to the Fact or Experience-whole. Fact *is*, but it is hardly allowable to say that Fact is *real*. The realm of pure ideas and forms exists; and it is another question whether this realm is real or unreal—whether, for instance, it is more real or less real than the facts of concrete experience. We shall, however, return to this question in another place.

The second reason why a common root must be conceived for both form and matter, quality and quantity, is this: form and matter are the two necessary foci of one complete curve of conception; so that we cannot conceivably have the one focus without also having the other. The curve itself will cease to be,—its determining equation will cease to be,—if by any possible fiat we can make one of the foci non-existent. To use another analogy, we may say that they are the two poles, positive and negative, of one being-concept. The being-concept will cease to exist, if one of the two poles can by an unthinkable ukase be made to vanish. Form apart from matter is just as unthinkable as effect apart from cause. Form of "nothing" is really the negation of form. For form to exist it is, of course, not necessary that it must be correlated to a particular kind of matter: *any* matter will do. Thus different materials may be of the same form. At least, they may be thought to be so, In the concrete order of experience, particularised form and particularised matter go together: If, for instance, the particular form of A be P, and that of B be Q we do not find that A and B exchange their *actual*, particularised forms, P and Q.

On the other hand, matter also is correlated to form: it is inconceivable that absolutely formless matter exists. Absence of form can only mean absence of particular forms—this form and that. It is not simply the case that, empirically, form and matter are always found to go together; they *do* so; but we are not here speaking of their empirical nexus or connection. The very concept of the one becomes impossible or inconceivable without that of the other. The idea of pure form, absolutely isolated from that of matter, is an idea involving contradiction. In this sense, these ideas are "relations." Since, therefore, form *per se* or matter *per se* is inconceivable, and since in having to render a logical account of the universe we cannot but go by the rule of conceivability, or what ultimately comes

to the same thing, by the law of identity and contradiction, we are, I think, bound to say that form and matter are isolatable from each other neither in their varied, intertwined ramifications, nor in their fundamental root. In other words, we are entitled to take it as a logically assured position that the two have a common fundamental root. Some dualistic philosophies have sought to make too much ontological capital out of the alleged "intractability" of matter and "purity" of form, and have attempted to foist the impure and the pure upon two separate and independent Beings. The Indian Sāmkhya System of Philosophy has also been constructed on a dualistic basis; but its dualism is not the dualism of matter *per se* or form *per se*. The *Prakṛti* of Sāmkhya is matter-*cum*-form; and the *Puruṣa* of Sāmkhya is neither matter (as commonly understood) nor form. We are not here concerned with this type of dualism; and yet, it is worthy of note that Sāmkhya has not isolated matter from form, and referred them to distinct origins.

The third reason is empirical. Neither observation nor experiment has ever succeeded in isolating the one from the other (with but one possible exception to be considered later) —to get at or suggest the possibility of getting at either pure form or pure matter. It is no doubt observed that in many cases the complex forms have their beginnings in relatively simpler forms; for example, a plant or animal of a very complicated structure has its origin in a seed or germ that is relatively a simple thing. Under the microscope the seed or germ will not of course appear so simple as it appears to the naked eye; yet, biologists are inclined, since the days of Wolff, Oken, Neckel and Bær, to adopt evolution by "epigenesis" rather than evolution by unfolding ("performation" as it was called); in other words, it is not now generally thought that the seed of the germ simply unfolds itself in becoming an oak or a whale. But no honest scientist will pretend to

think that this is the ultimately true or final solution of the riddle of evolution.

The note of absolute assurance which runs through the following assertion by Haeckel in the last century will not bring assurance to the same extent to the mind of the scientist of the present century opening to *new* orders of facts and taking *new* orientations in their interpretation:—"Thus, as Wolff justly remarked, the embryonic development does not consist in an unfolding of pre-formed organs, but in a series of new constructions; it is a true epigenesis. One part arises after another, and all make their appearance in simple form, which is very different from the later structure. This only appears after a series of most remarkable formations. Although this great discovery—one of the most important of the eighteenth century—could be directly proved by a verification of facts Wolff had observed, and although the 'theory of generation' which was founded on it was in reality not a theory at all, but a simple fact, it met with no sympathy whatever for half a century. It was particularly retarded by the high authority of Haller, who fought it strenuously with the dogmatic assertion that 'there is no such thing as development: no part of the animal body is formed before another; all were created together'"[1].

So also said Herbert Spencer: "In the course of its advance from a germ to a mass of relatively great bulk, every plant and animal also advances from simplicity to complexity".[2] Again, more definitely in another place[3]: "Already we have recognised the fact that the evolution of an organism is primarily the formation of an aggregate, by the continued incorporation of matter previously spread through a wider space. Every plant grows by taking into

[1] *The Riddle of the Universe*, pp. 15-16.

[2] *The First Principles*, p. 437.

[3] *Ibid.*, p. 249.

itself elements that were before diffused, and every animal grows by re-concentrating these elements previously dispersed in surrounding plants or other animals. Here it will be proper to complete the conception by pointing out that the early history of a plant or animal, still more clearly than its later history, shows us this fundamental process. For the microscopic germ of each organism undergoes, for a long time, no other change than that implied by absorption of nutriment. Cells embedded in the stroma of an ovarium become ova by little less than continued growth at the expense of adjacent materials. And when, after fertilization, a more active evolution commences, its most conspicuous trait is the drawing in, to a germinal centre, of the substance which the ovum contains."

Nevertheless, it cannot be pretended for one moment that the embryological history or "ontogeny" of the plant or of the animal can be understood and interpreted in terms of cell-nutrition alone. Apart from the un-explained fact viz. "ontogeny recapitulates phylogeny" (the embryological history of the animal is a recapitulation of the evolutionary history of that animal on earth), we have many an unsolved riddle contained in the fact of impregnation (e.g. only one of the ciliary cells floating and swimming in the male element being "favoured" by the stationary ovum and allowed to penetrate it; the fusion of the nuclei of the two cells and the formation of the "cytula" or stem-cell in which the constituent factors enter by "halves", and so forth), the formation of the triple "derm" or "blast" and their development according to a definite structural plan, and similar other facts; and these undoubtedly point to "the hidden architect" of Huxley chiselling out the features of the developing organism with his "impalpable tools".

Epigenesis may be a fact in this sense that the features of the organism are formed by "accretion" of matter to the

cell-substance from without; but as in the case of the crystal the accretion of outside material to the nucleus is determined by a definite geometrical plan, so in the case of the organism, the ontogeny, depending as it does on nutrition and environmental conditions, is presided over by an informing plan or "design". This is an aspect of the question which no amount of "accretion," no "simplicity" in the earlier stages of embryological development, ought to conceal. A type or plan or "idea" (in the sense of Plato) undoubtedly works in the development of the individual organism; and it is immaterial whether it works immanently in the cell-substance or from outside. Whether the "unit" of living substance be a "monad" in the Leibnitzian sense or not (Leibnitz appears to have subscribed to the theory of "scatulation" or "boxing up" as it is called in embryology), it is undeniable that the growth of an individual organism cannot be accounted for by a mere fortuitous conglomeration of living molecules.

Conglomeration or accretion by nutrition is a fact; it is also highly probable that an "original impetus" (in the sense used by Prof. Henri Bergson) is operative in the growth of the individual as well as of the species—that in accounting for the actual fact of evolution one must steer clear of the cylla of mechanistic theory as well as of the charybdis of finalistic theory. But such "original impetus", though some of its exponents will have none of a pre-fixed and pre-determined type or plan, is an impetus which *does* evolve in a fashion which indicates that its products, though "new" in every instance, are also similar to the extent of being classifiable into genera and species, and though moving continuously from freshness to freshness, are also suggestive of cycles and rhythms. In other words, an "original impetus" seated at the root of the evolutionary process cannot be conceived as an absolutely blind and chaotic tendency; and

though it may not be absolutely pre-determined, it is self-determined at every instant to the extent that it turns out cosmic "matter" in accordance with manifest "forms" or "types".

This is an interesting question into which we need not at present go. The point is this that at no stage of evolution (whether of the individual or of the species) do we come across a datum which is "matter" only, in relation to which some kind of "form" does not either intinsically or extrinsically co-exist. Their correlation is found at every stage, early or late. And further: in the early stages simplicity of form may be more apparent than real—that, in fact, the apparent simplicity of the structure of the germ-cell may be a "cover" for the great condensity and complexity of the evolving stresses operating therein. Thus the apparent simplicity of the "material" apparatus of the germ-cell probably co-exists with a vast condensity and complexity of the "dynamic" apparatus given in it.

That it may be so is indicated by several facts. The highly specialized characters of the micro-organisms, their "hobbies" or eccentricities, point to their probably possessing a highly differentiated organic apparatus not at present discernible under the microscope; but even assuming that the material apparatus is simple, it cannot be gainsaid that the apparatus of vital efficiency or dynamism in such cases is one that combines condensity and complexity: otherwise the wonderfully specialised individuality of the micro-cocus would be unintelligible.

And once this is granted, we cannot draw a line and say that the relationship of smallness (and apparent simplicity) of structure and condensity and complexity of functional efficiency does not go farther than this. Whether or not "vital force" be something distinct from "mechanical force" (a distinction which, in the last resort, need not be maintained), it

is clear that in the "colloidal" structure of the molecules of protoplasm ("the physical basis of life"), we must look for a provision whereby cosmic energy has become configurated and condensed in such wise as to make a living molecule an apparatus for the characteristic operations of life. Whether the unit of "vital force" be called a "neuton" or by any other name, it is evident that the minimum space in which a given vehicle of its operation may exist, need not mean also a minimum of its dynamic value. That is to say, the smallest living apparatus may involve a vastly complicated and condensed dynamism. In a recent meeting of the Far Eastern Medical Congress in Calcutta a paper was read which suggested that disease-producing (pathogenic) microbes may have their own diseases produced by other microbes; and once this suggestion is allowed, the mind refuses to halt at any stage, frightened by the possibility of an infinite regress.

And the researches of the Indian savant, Sir J. C. Bose, showing the analogies of response, and consequently of structures and functions, of plants and animals, down to the least units of each kind, are evidence of the fact that the elements or aspects which are "patent" in the animal are "latent" in the vegetable; and that such extremely delicate means of detection as are afforded by the Crescograph, the Electric Probe, the Resonance Recorder, and so forth, shew that what is latent can also be made patent; and all this tends to demolish the superstition of the comparative simplicity, poverty and low efficiency of the "vegetative" cell. But imagination refuses to stop where actual demonstration has so far brought us: the living molecule itself, structurally and functionally, may not be so simple a thing as we may be wont to believe. It may be a "monad" or miniature universe after all.

The living molecule is a highly complex and unstable combination of certain atoms of which Carbon, Hydrogen, Oxygen and Nitrogen are the most prominent. Each of these

atoms, again, is a system of electrons and protons with its characteristic "atomic number". One electron or unit of negative electricity is supposed to be equal to any other; but Johnstone Stoney, the inventor of the name "Electron", remarked—the electron being of finite magnitude, imagination impels one to picture it as a tiny system itself with constituents smaller than itself, and these latter again as systems of still smaller constituents, and so on. It is also worthy of note that stresses or operative forces become correspondingly massed and condensed as the area of their operation becomes smaller and smaller. In the system of the atom, for example, the motions of the electrons are not "lilliputian" motions, but motions of exceedingly high velocities comparable to the velocity of light; and an infinite force is necessary to bring together two electrons. The "jumps" of the electron in its orbital motion prove, among other circumstances, that the world of the electron is not merely a world of tremendous motions and colossal forces, but a world in which there are "hobbies" or eccentricities too. Simplicity of manner, therefore, is a standard to which this world of ours does not conform.

Leaving the electrons and protons and æthers as representing merely stages in our progress to the *fundamentum ultimum*, shall we come at once to the four-dimensional continuum of "points" of the Relativitist? Are "point-events" with their "intervals" the last constituents of the world? It is no doubt a strong point of Relativity that it has abandoned the space and time of common experience as supplying the only possible basis for constructing the edifice of physical science. Our perceptual space is one out of many possible spaces mathematically studied by a host of meta-geometricians; and the Relativity Theory leaves the fundamental framework of the world so far undefined, that our world in perceptual space and time arises out of a particular mode of defining and

determining the fundamental frame-work. Space and Time, as we have them in perception, or rather in the review following upon perception, are, therefore, aspects, among many possible others, which are defined and determined with reference to the fact of perception. This need not, however, make them *a priori* in the sense Kant made them, having no applicability to the matter of experience *per se*. This means that the substratum of the world of experience exists in many possible spaces and times of which, broadly, two are "selected" by us.

If that be so, some of the limitations which apply to the phenomena of common perception, may not apply to the substratum itself. A portion of matter cannot be, for example, in two places at the same time in the world of common space; or two portions of matter cannot be in the same place at the same time. But this need not be so in the substratum itself which has not been identified as the world in space and time. In that substratum world, these for us inconceivable relations may subsist—a thing can be here and there at the same time, and two things can be here at the same time. In the world of common space, the vanishing of the interval between two points must mean their coincidence; but this need not be so in the substratum world—like two converging straight lines they may only intersect when the interval vanishes.

Similarly, in our common experience of time, the three tenses, past, present and future, do not apear to meet at a point—they exclude one another. But the case may be different with the substratum world.

The Relativitist conceives his world and its fundamental constituents as not involving common space and time: which means that common space and common time are but two modes out of possible many ("manifold") in which the stresses of the world determine themselves with reference to our normal perceptions. The "tensors" involved in his formula for gravitation, for example, are so defined as to be independent

of "matter"; and as Prof. Eddington pithily observes, "unevenness in the gravitational field is not created by matter; that unevenness itself is matter". The point of the matter is that the Relativity Theory makes the world not empty of Space and Time and Matter, but vastly richer than these; it gives us a substratum of the undefined and unmeasured of which *our* space, time and matter are particular definitions or determinations.

The point-events and so forth, therefore, do not give us a picture that is simple and "primitive" in relation to the world of actual experience. A world of many possible spaces and times, in which, for example, matter represents but an unevenness in the gravitational field, is a world richer and fuller than the world of ordinary experience inasmuch as this is the latter only in so far as it may be defined and determined in a particular way. It includes the latter and is larger than it. The dream of simplicity in the background is not thus realised.

Our perception and thought proceed both by "limitation of the data", by an operation that we have before called—defining the undefined and measuring the unmeasured. So that the background or substratum is, by such limitation, selection and abstraction, relatively *simplified* in our ordinary experiences; the datum being vastly more complex than these latter. The world of experience is, for practical purposes, divided into three realms—matter, life and mind. That the boundaries are largely conventional is becoming more and more patent to us with the progress of science. But this is too large a question to be taken up at the end of a lecture. It is becoming more and more manifest, however, that apart from our pragmatic interests and the conditions and limitations of knowledge and appreciation created by them, "matter is less material and mind is less mental" (to quote Bertrand Russell's words); that, in fact, matter, life and mind are but

one fundamental Being-Power of which different aspects are emphasized in these; so that matter lives and feels without our suspecting it, and mind functions as matter without our taking cognizance of it.

Now, the analysis of each pushed to the last or as far as possible to the last, shows (as we shall see in another lecture) massed and condensed "points" of Being-Power, *plus*, some sort of a continuum in which the points are in stress with one another. Thus we have a continuum or medium for the "corpuscles" (units of matter—whatever these turn out to be in the last resort); we have a panspermic or cosmozoic continuum for the "life-atoms" and we must have a cosmic mind-stuff ("conscious" or "subconscious") for the different individual mind-centres to exist and stress in. If we provisionally adopt "electron", "neuron" and "pschycon" as the units in the three regions, we find that each is a centre of stress and strain in a continuum.

And we find further that neither the unit nor the medium is, apart from our pragmatic limitation and abstraction, simple and definable and measurable. That the electron appears as simple, definable and measurable merely shows that it is but a practical unit—not made to stand as the ultimate unit. Ideally speaking, a unit or centre *is* the continuum in a state of maximum condensation—maximum focussing of the entire Being-Energy which is diffused as the continuum. In it extensity or diffusion is reduced to the minimum, and intensity or condensation to the maximum. If the Continuum is + infinity, the "Point" in it is—infinity, expressing by the difference of sign the relation of extensity and intensity. But the Point or Centre we shall study later on.

The idea here especially relevant is this: units presuppose their continua; and units being the massed "strains" of their continua, the indefinability and immeasurability which pertain to the latter also really pertain to the former.

In other words, it will not do to imagine that to the extent that we push on to the units and to the continua, we are able to leave behind complexity and undefinability. It is not merely concrete experience at the actual or normal level which is, in its entireness, unmeasurable and undefinable; it is really so at *all* levels down to the points and continua. Thought of course at *any* level may so define entities (units or media) that they become measurable and even simple: in this way, science becomes a possibility. But such defining is partial ignoring of the actual data.

And since we have reasons (as we shall find) to reduce different continua (such as Matter, Life and Mind) to one fundamental Continuum pragmatically differently emphasized and regarded, we are entitled on the same grounds to assimilate the different units to one another, and regard the electron, neuron and pschycon, for example, as Enp, eNp, enP respectively, where the capitals represent our pragmatic " dominant ", and the small letters the " recessives ".

Analysis of experience, as we ordinarily have it, does not show, therefore, that matter and form are isolable—that we have one series in which form is reduced more and more suggesting " pure " matter " in the limit "; and another series in which matter is eliminated more and more suggesting " pure " form in the limit. The two not merely co-exist, but in reality, though not in ordinary or scientific convention, they retain to the last stage of points and continua their alogicality implying indefinability and unmeasurability. It is only natural, therefore, to assign them to a common root—to a common mine of alogical Being-Stress. *Brahman* as the *Pūrṇa* or Whole is the source of both the matter and form of experience—the material as well as the formal " cause " of the universe, as it is commonly put.

As underlying and evolving the multifarious matter-in-form, *Brahman* has been called by us " Stress " or Power

(suggestive of the Perfect Energeia of Aristotle's metaphysic and *Actus Purus* of the Schoolmen). This "Stress" is variously described as *Śakti*, *Prakṛti*, *Māyā*.[1] *Śakti is Brahman*: the relation is one of identity. The terms are often, however, employed in narrower and special senses. In employing them in this manner, we logically treat (that is, define and measure) what is *ipso facto* alogical. In this way, the term *Śakti* is commonly used to connote the dynamic or moving *aspect* of *Brahman*, as distinguished from the static or quiescent aspect which in the Āgama literature is spoken of as *Śiva*.

What we have been so far studying as "matter" and "form" have their common root in *Brahman* or *Śakti* conceived in the supreme sense. Alogically, either *exceeds* the characterization that It is the matter and the form of the universe; logically, It *is* the matter as well as the form. The case of the "Pure Æther" of Consciousness we shall study later.

[1] *Cf.* "Kāma" in the Ṛg and Atharva-Vedas; also, "Īkṣā", "Saṅgkalpa", "Tapas", etc.

VII

CONSCIOUSNESS AND BRAIN

THERE is an aspect of Experience-whole which, from the point of view of Vedāntism, is of supreme interest, but which cannot be made easily manifest to western thought. The Sanskrit term for that aspect is *Cit*, *Caitanya* or *Samvit*; and it is an untranslatable word. "Consciousness", "Cognition", "Intelligence", "Thought", "Awareness" are among the many English synonyms proposed; but the western meanings and implications and associations of these terms are such that they cannot be made to truly express the meaning of *Cit*. To make the best of a bad job, however, we choose the first term—"Consciousness"—for the purpose.

In western psychological literature this term has not been used invariably and precisely in the same sense. From cosmic consciousness or sub-consciousness to that group of mental re-actions connected with the excitations of the cortex of the brain (excluding, therefore, others which are not so connected) the term has been made to spread the net of its meaning wide and narrow. Within what is admittedly consciousness, a distinction has been recognised—as it must be recognised—between the "focal" and the "fringe"; so that it has been looked upon as a variable quantity. Then, again, a "threshold" of consciousness has been recognised, indicating that experience may be either above or below the threshold line. The floating iceberg with nine-tenths of its bulk submerged in the dark depths of the sea has not unoften been

requisitioned to familiarize the relation of conscious and sub-conscious experiences to us. The biologist would render the conscious half of experience in terms of the "reflex arc" becoming longer and more complicated on account of the nerve-process being "inhibited" in the central apparatus and switched off the usual short route (the reflex arc) into the longer and more complicated route of the cortical centres. "The child and the candle" case which, as stated in William James' *Principles of Psychology*, became classical in psychical literature, shows the difference between the shorter and the longer arcs or curves of neuron-flow, and along with it, the difference between states that are sub-conscious and that are conscious.

Experimentation with the "brain-less" frog etc. has proved that such animals can be made to perform practically the whole round of their normal activities upon appropriate stimuli being applied, and that the only noticeable difference is, in the words of William James, lack of spontaneity on the part of the animals operated upon, or "increased inertia". Now, since the brain-cortex is supposed to be the "seat" or "organ" of consciousness, these reactions of the brain-less frog or pigeon must be set down as sub-conscious. Practically the whole round of vital activities, including highly specialized reactions to external stimuli, can be gone through, so it seems, without there being consciousness at all. James' famous explanation of Habit, and the equally famous Lange-James theory of Emotion (which makes it a sort of "organic reverberation" or "resonance") gave to consciousness no essential rôle to play in the economy of mental life. Philosophers ever since the time of Descartes, who reserved (not strictly out of philosophic considerations—so it has been suggested by Ernst Haeckel and others) thought for man, but looked upon other animals as purely mechanical automata", the tendency of philosophy with a mechanistic bias

has been not indeed to reserve consciousness as the prerogative of man, but to deny the causal efficiency of consciousness as such. The mechanical order of phenomena, including nervous and cerebral phenomena, has been by such philosophy believed to be a "closed curve" into which consciousness or any other extra-mechanical factor has not been permitted to trespass.

This, however, is by no means the generally admitted position in western philosophy. Since, "selective or preferential action" as James called it is the true index of consciousness, and since selective action is, as it appears, inseparably connected with every living centre, we may legitimately infer with James that consciousness should not be restricted to what, to a given individual, appears as his cortical consciousness; that brain-consciousness is part of a wider consciousness "presiding over" all centres, whether cortical or subcortical. In this way, what a person accepts as his "normal" consciousness forms but a section of a larger consciousness which, in so far as it exceeds that particular section, was called by James "ejective". Whatever is included in the actual consciousness of a Subject is "objective" in relation to it; and whatever, not included in the consciousness of the given Subject, is included in another consciousness, is "ejective".

And once this larger and ejective consciousness is admitted, it is impossible to halt for good at an absolutely fixed line, and say that consciousness is only so large and no larger. If there be true indications for a panspermic or cosmozoic substance capable of "selective action", then such indications are also indications for a cosmic consciousness. Then, again, traces of spontaneity and selective action may at last be discoverable in the so-called "dead" matter also: as in the micro-organisms we have "hobbies" to reckon with, so in the orbital motions of the electrons we have "jumps" to

reckon with; and these together with many other facts may refuse to tally exactly with mechanistic explanations, and may indicate a residuum of spontaneity in all deterministic solutions of material behaviour, a margin of freedom and selective activity exceeding the rigid iron framework of governance by formulae. Special reference should here be made to the now well-known Heisenberg's Principle of Indeterminacy.

But in western thought the point at issue between consciousness and subconsciousness is not decided. Amongst classical German thinkers, Hartmann and Schopenhauer are two notable examples of a philosopher starting with a World-Principle unconscious or subconscious in itself which *wills* and " swells " into consciousness at this level or that. And this type of thought has its present-day representatives also. Particularly has this thought prevailed with those who, confronted with the ever-increasing and substantially indisputable mass of parapsychical and crypto-psychical phenomena (hypnotism, plural personality, dissociation and exteriorization of sensibility, X-ray vision, telepathy, and so forth), have sought refuge in the depths of a Cosmic Sub-consciousness (which is the active medium for all personal consciousnesses to operate in) to escape from the alternative of a Cosmic Consciousness and intelligence to which " spiritualistic " phenomena (connected with after-life etc.) so obviously point.

Others, not yet " distracted " by the call of this " new " psychology, have entrenched themselves into a larger subconsciousness as underlying the vital and mental activities of the living centre, rendering their freedom, spontaneity and selectiveness possible, in order to escape from the alternative of mechanistic and materialistic philosophy which they find to be inadequate. The case of consciousness *versus* sub-consciousness is thus an important one, and awaits decision.

The connexion or nexus between psychosis and neurosis is generally taken as proved. But what is the extent of the

connexion? Representing the two parties by two circles, A and B, respectively, can we prove that A and B are exactly co-extensive? If so, then, not only are mental phenomena impossible without parallel nerve-phenomena, but also *vice versa*. Some theories have actually gone farther than the whole length of believing this: we might instance W. K. Clifford's "mind-stuff" in this connection. The "atom-soul" and "cell-soul" are not unheard of curiosities in the history of speculation. Fechner, for instance, speculated about the cell-soul. Wundt (pupil and assistant of Helmholtz in his youth) leaned first to materialistic explanation, but in maturer years "repented of the sin of his youth", and leaned to spiritualism. But, explanations apart, the question now put is this: to what extent does matter-motions and mental processes overlap as regards their correspondence?

Matter we find to be organised and unorganised or mineral. Organised matter, again, may be either organised as nervous mechanism or not so organised. The former, again, may be organised as the brain or not so organised. Now, does the correspondence between mind and matter mean only correspondence between mind and matter organised as the brain? Actual evidence goes to show that it is so; but is it so only?

If it be so only, then the phenomena of consciousness as regards their extent becomes = the cerebral phenomena which are smaller in extent than the general phenomena of the nervous system. In this case the greater bulk of nervous phenomena will be without the accompaniment of consciousness.

This seems to be the orthodox position among physiologists—cortical excitations are accompanied by consciousness, whilst sub-cortical excitations—those in the cerebellum, medulla oblongata and spinal axis for instance—are subconscious. *Some* nerve-phenomena, therefore, have consciousness

accompanying them: the circle, A, is thus partly cut by the circle, B.

Does this mean that B is wholly within A? If so, then there is no consciousness where there is no brain. This may or may not spell materialism according as the assertion is or is not made in an absolute sense. If the physiologist says—" so far as our actual observations go, we find brain phenomena and modes of consciousness to go together; but this does not mean that the former are *indispensable* for the latter, —that there can be no consciousness where the brain is not actively there",—then, he gives no more than a statement of fact, and one that is non-committal. And it is hardly necessary to point out that only such a non-committal statement of fact is justified on the data which science has so far been able to get together.

Now, if only such a non-committal statement is permissible, brain-states and conscious states become two intersecting circles: *some* brain-states are accompanied by *some* conscious states. Or, perhaps, the former circle falls within the latter: which means that *all* brain-states are conscious states, but not *vice versa*; there may be "disembodied" consciousness also. At any rate, it leaves the door open for such an hypothesis.

The actual evidence before us does not warrant us in going beyond a non-committal statement as the above. If with William James and others we extend the sphere of consciousness so as to include what he calls the "ejective consciousness" connected with the selective action of the lower nervous system,—if, in other words, we call sub-cortical phenomena "ejectively" conscious and not subconscious—, then, also, it cannot be taken as proved that the nervous system is an indispensable organ of consciousness. For such a proof we should be in a position to apply the "Method of Difference": Consciousness is where the nervous system is;

and, other conditions remaining as before, consciousness is not where the nervous system is not. What is called the "Method of Agreement" (other circumstances in the antecedent and consequent are found to vary, but in all observed cases the antecedent and the consequent *agree* in having the neurosis and the psychosis) raises, as J. S. Mill and others rightly remarked, only a variable degree of probability—which is the greater, the greater is the number of relevant instances of their agreement observed. Not to speak of the Method of Difference whose probative value is higher (no inductive method can establish a truth of a higher value than the probable truth—as Bertrand Russell and others have shown), it is not easy to satisfy ourselves that even the method of Agreement strictly applies to prove an invariable connexion between the neurosis and the psychosis. Because, of the two correspondents it is impossible to assure ourselves, in view of the admitted difficulties in both the fields of observation (neural and psychical), that in the cases observed the two sides agree *in nothing else* than in the presence of the two correspondents. On the one side we have an observed neural fact. But what are the other circumstances connected there-with? Is the neural fact isolable from the entire tissue of circumstances of which it forms a part? The same with the psychosis: can it be isolable from the whole tissue of occurrence of which it forms a part? Are we sure that we have an appreciation of the whole tissue, even so much of it as is "relevant"?

But it will be said that though the observed data are not sufficient to prove *causal* correspondence between neurosis and psychosis, they prove correspondence itself, or the bare fact of going together. The fact of going together is undoubtedly observed in a certain number of cases; but this *proves* nothing beyond the observed cases. And even in the observed cases, it creates no presumption as to neurosis and psychosis

being causally or otherwise invariably connected. If the number of observed cases be great, and real exceptions have not been observed, and, further, if correspondence has been observed in cases more or less differing in other circumstances, then a fair probability is raised as to their also going together in the cases not yet observed. In other words, it will render it probable that in all *essentially similar cases* not yet observed, neurosis and psychosis will go together. If, for instance, correspondence has been observed between the two in the case of a certain person, A, it will be probable that a similar correspondence will be observed in other persons or animals whose nervous systems and minds are constituted similarly to those of A. It creates no presumption as to there being a causal nexus or any other kind of invariable connexion between neurosis and psychosis in general. The Uniformity of Nature and the Principle of Continuity do not warrant us in ignoring the actual conditions in which the course of Nature is uniform, and laws and principles are continuous. If X is there where ABCD are there, uniformity makes us believe that X or something akin to X will be there wherever ABCD or something essentially similar to them are there. But in actual experience, it is not often easy to satisfy ourselves that ABCD or some assemblage or *ensemble* " essentially " similar to ABCD, *are* actually there.

In Indian Logic the name *Vyāpti* has been given to invariable connexion on the basis of which an inference can be drawn as to B's being there where A is there. The definition of the invariable connexion as established in Neo-Logic may be, theoretically, regarded perfect as a formula; but in any particular empirical application of the formula it is difficult, if not impossible, to satisfy ourselves that the application is absolutely all right.

Shall we take the simplest definition of invariable connexion that is commonly given—B is invariably connected

with A, if it be never found in the "realm" where A is not?[1] This is all right (except in those cases in which A stands for some entity which is never non-existent);[2] but how can we ever be practically sure about the "never"? Absolute negation is the fundamental idea underlying every demonstration of *Vyāpti* or invariable connexion;[3] that is to say, we must be able to satisfy ourselves that the absence of B is absolutely consequent upon the absence of A. Now, this is a satisfaction devoutly to be wished for, but it can hardly be attained to the requisite degree in any empirical case: hence demonstration by induction is never more than presumption or probability.

In the case under discussion, it is not possible to satisfy ourselves that consciousness *never* is where neurosis is not; if, in other words, we draw a circle to represent the non-existence of neurosis, we can never be practically sure that consciousness is not *within* that circle—that consciousness is not where nerve phenomena is not. Such "negative argument" is the soul of the Method of Difference also. The observations and experiments of the physiologists have indeed shown that (1) a particular nerve phenomenon and a particular mental phenomenon go together in the observed cases, and, (2) the absence of that nerve phenomenon is also accompanied by the absence of that mental phenomenon. This makes of course the probability of their being present and absent together in the unobserved "similar" cases fairly substantial. But it does *not* prove an invariable and necessary connexion between the two—not to speak of nervous phenomena

[1] "Sādhyābhāva-vada-vrittitvam"—Vyāpti-Panchakam.

[2] Kevalānvayī.

[3] Atyantābhāva-pratiyogitvam. cf. Pratiyogi-vyadhikaranahatu-samā nādhikaran atyantābhāvāpratiyogi-sādhya-sāmānyādhikaranyam."—Jaga dīsha. Cf. Also the definition of Vyāpti in the Second Chapter of *Vedanta-Paribhāshā*; that of Mithyātva in "Chit-sukhi" and "Advaita-Siddhi".

in general and mental phenomena or consciousness in general.

It is well to bear this in mind, because the observations of the physiologist have commonly been understood as *demonstrating* an invariable and necessary connexion between the nervous mechanism and consciousness. Consciousness has, accordingly, been defined *in terms of* the reactions of the nervous system—" a cross section " of the environment made by the reactions of the nervous system, to take a specimen. Granting that the observations are correct, they merely *state* the fact that a certain type of consciousness has been found to co-exist with a certain type of nervous *ensemble*, and they raise a probability that in all similar nerve *ensembles* similar types of consciousness will be found. They do *not* prove that other types of consciousness do not exist apart from *any* nerve *ensemble*; or even that the *same* type of consciousness cannot exist apart from the given *ensemble*. The mere fact that B is found with A in some cases, and is absent where A is absent in some other cases, is no conclusive or even presumptive evidence that A is *always* there where B is there, and that A is *never* there where B is not there.

And particularly is this to be borne in mind in view of the exceptional complexity of the data on the strength of which a nexus between neurosis and psychosis has been sought to be established. That there is observed correspondence between some nervous states and some states of consciousness need not be called in question; but question *does* arise as to the nature and extent of both the correspondents. It has so far not been possible to show a connexion between a particularly defined nervous state and an equally defined state of consciousness. Possibly, as James and others suggested, the nervous system acts as a whole with its stress laid on special tracts (centres and fibres) when we have a special kind of experience. And whatever limitation of the actual data may be convenient

for science, it is undeniable that the nervous system does not in fact operate as a system isolated from the whole organism; nor does the organism operate as though it were a solitary machine, absolute and self-sufficient, in the universe. The organism works as a "centre" in the universe of things and relations. Now, the universe in which the organism is an operative (acting and re-acting) centre is not purely material or physical.

So that even after making a diremption of the real universe of being and becoming into a Subject's consciousness and the total objective content of that consciousness which that Subject cognises as his "world" or "environment", it is clear that we cannot link up his consciousness or the "modes" therein with this or that element of the world or environment taken in isolation; but that consciousness of that Subject as a whole may be linked up with the stressing of the world as a whole. And though for particular modes of consciousness, stressings of particular parts of the world (*e.g.* the Subject's organism, his nervous system, certain ganglia in the cortex of his brain, and so forth) may be indicated, it should always be plainly observed that the actual action and re-action, and, therefore, correspondence, are between the two wholes, and not really between the two "points" or particulars through which a connexion appears to be established.

When, for example, I press the hand of another person in gratitude or love, it is not the fingers of the two persons that are the real correspondents: it is a transaction between two whole personalities effected through the fingers that have met and pressed one another. Every external stimulus or every bodily or mental reaction is of this nature: it is a transaction between wholes. Particular "points" or features or organs may habitually serve as the active partners or agents as in the case of the meeting fingers; but the real partners are there "behind the scenes." Our pragmatic action and talk would

in most cases require the fingers rather than the person; but this should never obscure the fact that the persons and not the fingers are the real partners.

To drag in the "wholes" from behind the scenes may inconvenience pragmatic and particularistic thinking, but it is essential in the interests of philosophy that the persons instead of their mere finger-tips should be made to appear. If the finger-tips alone are present before us, a habitual meeting of theirs may naturally lead us to think that such correspondence exists between the finger-tips alone, and, conversely, no correspendence can exist apart from the finger-tips. But if persons instead of finger-tips alone are there, we can easily perceive that though in many cases correspondence between them is effected by the meeting finger-tips, yet that is not the only possible way or means. I can express my gratitude or love to another person by a genial pressure of his hand no doubt, but also by a look, a word, and in a thousand other ways.

The analogy is important in this sense that, though a particular attitude and state of the nervous system may be there when a particular mode of consciousness is there, this need not mean that that mode of consciousness is connected with that nerve attitude and state alone—that that consciousness cannot be where that nerve attitude is not there. The "whole", the "person" in this case is the entire universe objective to the Subject whose consciousness we are discussing; the nerve attitude is merely the "finger-tip." And though the finger-tip may habitually express a particular affection of the Subject's consciousness, and may thus be its "correspondent", that affection, or consciousness for the matter of that, may possibly have other expressions and correspondents also—as a look or a word for gratitude or love.

The finger-tip is prominent not only in the case of the objective partner, but also in that of the subjective. Consciousness, too, is often ignored as a whole, and conveniently

treated, as this particular affection or that. The whole, the "person" is hidden behind the scenes. When, therefore, I enquire about the "objective" correspondent of a particular "mode of consciousness, I generally cut a slice out of the live whole, which is an undefined universe of experience as we have found, and correlate this to a particular regional excitation of the nerve centres and fibres. In other words, I try to understand the transaction as one between two sets of finger-tips. In reality a whole universe of consciousness emphasized at a particular feature or features is there: and this is "confronted" by another whole universe of "objective" things and relations. These are the two wholes or "persons" accosting each other: and it is only to note their meeting finger-tips to observe that a sensation of, say, green colour is correlated to a certain regional excitation of the occipital lobes of the brain. That sensation of green is an element abstracted from a universe of experience, and the two interacting partners are the two universes, objective and subjective. And though, habitually, in some observed cases, their correspondence is effected through the "finger-tips," it is hazardous in the extreme to infer that correspondence may not be effected through other means, such as a "look" or a "word."

It will, however, be urged that correspondence between two "persons" effected through different means are really different correspondences; that though gratitude or love, for example, may be *similarly* expressed by a pressure of the hand, or by a word or by a look, it is not *identically* expressed by these. So for an actually special and concrete fact of correspondence, we must have not merely two persons in generally appropriate moods and bargaining in nearly or substantially the same way, but we must have two special *ensemble* of conditions on the two sides. To use symbols: Suppose the two wholes are ABC and XYZ. Then, for special attitudes of them, A'BC and X'YZ, we have the

correspondence, C; for other special attitudes, AB′C and XY′Z, we have the correspondence C′; for still others, ABC′ and XYZ′, we have C″. And, though C, C′ and C″ may be similar, they are not identical. Hence it may be that for a special sensation of green, a special excitation of the occipital lobes may be necessary. Hence also, though consciousness and its modes in general may possibly exist apart from a special nervous apparatus, a particular consciousness and a particular mode of it must correspond to a particular attitude of that apparatus.

With regard to this, it may be observed that, as shown before, the actual evidence before us does not prove an invariable correspondence between a particular neurosis and a particular psychosis. Even assuming that it does, the question is raised as to whether the same particular effect (or correspondent) may or may not have correspondence with plural causes —whether, that is to say, the same phenomenon, X, may or may not have the same sort of correspondence with A,B,C. This question of plural correspondence or causation is one that does not admit of an easy solution; but, nevertheless, we may be permitted to say this that causation (why A is invariably followed by B and not by C) is such a deep mystery, that one is hardly justified in dogmatising about it— to say, for instance, that a particular phenomenon, X, can follow upon ABC being there, and *not* PQR or ABD or BCE being there. It is true, of course, that in actual experience we find some sort of fixity in the causal connexion; and such fixity is practically useful. But this empirical and pragmatic fixity is no absolute guarantee for its universality and necessity: it does not preclude the possibility of alternative or plural correspondence.

So that though a particular neurosis and a particular psychosis may be empirically found to go together, it does not absolutely prove that the latter may not be there where

some alternative correspondent (that is, not neurosis) is there; that, for instance, a particular mode of consciousness, empirically found to be associated with a particular state of the brain, may not possibly exist apart from the brain-state—in a "disembodied" manner (to take an alternative case). Nothing can be urged *a priori* to show that this is impossible or improbable.

On the other hand, if there be good reasons to believe that the world's finite and particular things are constituted after the manner of the "monad" (or, miniature world) in which the *whole* Being-Power is condensed in a manner (we shall discuss this while dealing with "Centres"), then the "germ" or possibility of consciousness is contained in everything, and though, ordinarily with reference to us, certain modes of consciousness appear to be correlated to particular things, namely the brain, it does not follow that any other thing, say a lump of "dead" matter or even an "immaterial" substance such as the "etheric double" of the theosophist and the non-spiritualist, may not, under any conceivable conditions, be the vehicle and correspondent of those modes of consciousness. In *our* pragmatic relations, the brain is, no doubt, the habitual vehicle of their manifestation; but a lump of "dead" matter, having in reality the "capacity" of the brain latent in it, may possibly, under certain circumstances, make that latency patent, and thereby manifest the states of consciousness in question *without requiring to become or transform itself into a brain for that purpose.* It may achieve the same result by an *alternative* method and means. We shall, however, revert to this aspect of the problem later.

That such alternative vehicling of consciousness is possible is becoming more and more evident as our acquaintance with crypto-psychical and para-psychical phenomena, of an unimpeachable character, has been proceeding apace. Even leaving aside the "spiritualistic" phenomena which appear to

"prove" the existence of disembodied Spirits that feel, think and will in particular ways, the more generally admitted paraphysical phenomena of multiple and projected personality, dissociation and exteriorization of sensibility etc., indicate, though one can now hardly pretend that they *prove*, that the physical organism as an "organ" of consciousness is no *sine qua non*—that consciousness may exist and function detached from the physical organism, though, ordinarily, it appears to exist and function attached to it. At any rate, it seems likely that consciousness can exist and function associated with a vehicle "subtler" than the gross physical organism.

When, for instance, in an experiment of projected and exteriorized sensibility described by Professor Boirac, we find that the subject is sensitive not merely "over" his skin, but away from him over a glass of water with which some sort of connexion has previously been established, it is evident that the pinch or pin-prick given to the air just above the glass of water where the subject's sensibility has been projected, is not conveyed to the subject's brain in the ordinary way through the sensory, afferent nerves, but through subtle, impalpable threads of connexion, whatever they be. For the conduction of the sensory, afferent current an alternative route and method seems to be provided in this experiment; and yet, for such conduction, the afferent nerves seem to be indispensable. Now, the point is this: If an alternative means is provided for the afferent nerves, may not an alternative means be provided for the brain itself, or the physical organism for the matter of that?

Consider, again, the phenomena of "levitation", or the moving or raising of material objects by volition or mentative energy itself. Ordinarily the raising of physical objects is effected through the agency of the brain and the motor, efferent, out-going nerves working the muscles of the body. But in levitation this agency, in so far as it relates to the activity

of the motor nerves and the muscles, seems to be dispensed with. Here, too, an alternative means and method seems to be provided. Now, if consciousness can function apparently without the intervention of the motor nerves and muscles, is it not conceivable that it can function without the intervention of the nervous system also?

We need not go into other evidences supplied by "abnormal" psychology. The disembodied Spirits of spiritualistic research supply us with more conclusive evidence; but we do not propose to "invoke" them here. Those who, admitting the validity of the spiritualistic phenomena, are still seeking an explanation in the dark profundities of subconsciousness, have also been constrained to admit that this unfathomed (and perhaps cosmic) subconsciousness is too deep and too colossal to be awarded to, and settled on, special physical organisms. The physical organism makes but a small "cross-section" of this cosmic sub-consciousness, and this cross-section is, for all ordinary practical purposes, our normal consciousness. The physical organism is thus the "organ" habitually employed by cosmic sub-consciousness for certain purposes, but it is neither the *whole*, nor the *only* organ.

Now, substituting "ejective" or cosmic consciousness for sub-consciousness, we may affirm the last stated proposition in regard to it: the brain is the habitual vehicle of consciousness under ordinary pragmatic conditions, but it need not be the *whole* and *only* organ. Consciousness may change its means and ways of habitual, pragmatic manifestation. Possibly it is changing them even now without "our" (that is, pragmatic selves) suspecting it. Abnormal psychology, in every instance, is not exceptional psychology, it may be common and normal enough, but our interest being commonly elsewhere, we do not suspect that it *is* common and normal.

The vital issue between consciousness and sub-consciousness we may defer for consideration in connexion with the "Centres." It is, as we shall see, mainly a matter of definition. If consciousness be restricted to what a given Subject practically knows and accepts (or recognises) as his consciousness, including the "fringe", then, surely, a larger category, though in essential respects akin to normal or pragmatic consciousness, is needed to cover the whole realm of the subject's experience and the bargaining of that Subject with the experiences of other Subjects. Automatic action, memory, slumber, "unconsciousness" or swoon, and many another psychical phenomenon, not discoverable in the realm of normal wide-awake or half-awake consciousness, will require to be referred to sub-consciousness. But this sub-consciousness is one of which *we*, pragmatic Subjects, are not ordinarily conscious. And this need not mean that this is sub-conscious *per se*, or sub-conscious with reference to some other "Centres." Just as our own "fringe" of experience is semi-conscious fading into the sub-conscious, so "our" sub-conscious, may be conscious in a different "stock exchange" of relations—either to ourselves under different conditions, or to other "Centres."

That "our" consciousness is indefinitely vast at any moment ought to be patent to everybody. But still it has a boundary, though one fails to positively say where. It is thus not the whole. But what lies outside its boundary? Where are its memory "vestiges", automatic thinkings, swoons, slumbers, and so forth? Shall we discover them in *sub*-conscious experience, or will cortical and sub-cortical arrangements and readjustments alone do? Suppose we adopt the latter alternative: there need not be subconscious ideation and so forth, but merely brain-changes which embody memory vestiges, automatic actions and "thinkings", and so forth. James in his Psychology leaned decidedly to this "cerebral"

explanation of the so-called sub-conscious experience, though on many vital points of philosophic interest he joined issue with the "cerebralist" and the "phosphorescence philosopher."

But, surely, consciousness, like any other thing of which we do not have immediate experience at any moment, is also inferable by means of certain characteristic signs or indices. In this way, I think that some other "Centres" besides myself have also their consciousnesses—for example, Paul and Peter. The existence of other "Centres" in stress with myself is given in that immediate experience which I call my own; but I think that I infer the fact that these other Centres also have their own experiences. The Cartesians notwithstanding, such inference (I call it "inference" provisionally) is commonly extended to the animals, and may be extended to the plants—not merely to the collective cells, but even to the individual cells. Now, supposing that it is *inference*, I shall have to go by certain marks or signs or indices the moment I cross my own boundaries (pragmatically settled of course). Why do I, for instance, think that the cell, too, has an experience of its own?

The most characteristic sign is "action out of freedom", or in one word, "play." All living matter at least—we shall discuss "dead" matter later on—is free in this sense that it can, and habitually does, act on an inner impulse or spontaneity which makes (as James truly observed) its behaviour "unforcseeable and incalculable"; and this spontaneous action, which is also preferential and selective, is Play. This, when extended to "dead" matter also, is "Līlā" out of "Ānanda" which is in every being and is the root of its impulse. This is one of the profoundest teachings of the Vedānta.[1]

[1] See *Taittirīya Up.* II. 4; also, III. 6. *Bṛhadāraṇyaka Up.* IV. 3. 32. See also *Brahma-Sūtra* II. 1. 33 for *Līlā*.

Now, if "Play" in the sense here suggested be the index of consciousness, then, evidently, we cannot stop till we have come to cell-consciousness, or even to atom-consciousness (as further consideration will shew). Assuming that a corpuscle has a consciousness, we have "group" consciousness when a number of corpuscles combine to form a chemical atom; a larger "group" when a molecule, say a molecule of protoplasm, is formed; a still larger group when we come to the cell; and so on. The "group" in these cases is the resultant and not the sum of the constituent consciousnesses; for example, my "body consciousness" is the resultant of the consciousnesses of the constituent cells. This idea of the "resultant" we shall further explain when we come to deal with the "Centres". Since the very essence of consciousness is freedom and play, a resultant cannot be a merely mechanical resultant.

What I recognise as my "brain-consciousness" may not thus be the only consciousness assigned to me as a given "Centre." The countless living cells which constitute my body each has its consciousness (as I have inferred from the mark of "play"); the body as a whole has its group consciousness; and of this group consciousness I own but a part, namely that associated with the brain, as my normal consciousness. My owning a part and ignoring the rest is practically useful to me; but this does not mean that the larger "mass" thus ignored is either "material" only or merely "sub-conscious." It is a larger consciousness having its manifestation in freedom and play of which I happen to take no cognizance; but which is, all the same, consciousness associated with my body as a whole.

And since my body is not something that can be isolated from the world (and we cannot restrict it to the "gross", physical body), the group consciousness associated with that body is not the highest group possible or conceivable. Consciousnesses may be, in accordance with the extent of their

"grouping", arranged in an hierarchy of genera and species, and the *summum genus* is Cosmic or Universal Consciousness.

We cannot pursue this interesting subject further at the end of a Chapter; but it is worthy of note that our normal consciousness is probably not the whole of consciousness; that it is but a cross-section made from a larger (possibly cosmic) consciousness, and the nature and extent of the cross-section have been determined by our "evolutionary" needs—using the word "evolution" in not a purely biological sense. Thus there has been a sort of division of labour, very convenient, it seems, from both sides, between the cortical consciousness and the sub-cortical, in our organisms, not to take larger groupings. Probably each cell, each molecule, each corpuscle makes its own cross-section, which in Vedāntic parlance, is an *Upādhi* of Consciousness.

The grounds for believing in a larger consciousness of which, ordinarily, we have no apprehension, are not confined to the "inference" on the mark of free action or play upon which, for obvious reasons, we have laid so much stress. We want not merely to discover the larger and higher "dimensions" of consciousness, but also, so far as now possible, to catch the fundamental note of its being-manifestation: that fundamental note we have found in "Ānanda" and "Līlā"—ideas we shall especially develop in a separate Chapter.

Subsidiary reasons apart, the most vital reason for believing in a Consciousness of larger and higher dimensions of which our "normal" consciousnesses are pragmatically selected and accepted "cross-sections", is supplied by the "Fact" or Experience itself which we have studied in our foregoing lectures. The Fact is an undefined "universe": mind and matter, subjective and objective, me and not-me, and so forth, are polarities *inside* that universe; those polarities do not *divide* that universe no doubt; but they cannot be set

up as something dividing that universe from what is not Fact or Experience. The universe as apprehended by me now is not the Whole of course: we have actually a series of larger and larger universes, all being more or less veiled "acceptances" or pragmatic "cross-sections" of the Experience-Whole. And though the Experience-Whole is as such neither purely mental nor purely material, subjective nor objective, it *is* Experience all the same.

It is true that I am not hopelessly shut up in what I call my subjective experience. The belief that my subjective experience is not all—that there is a universe larger than, and in a sense independent of, my subjective experience—is one that is to be trusted. Experience itself gives me an assurance of a larger universe of which I own and accept but a part. The position is not, therefore, one that can be called solipsism or idealism in the sense in which the latter term is commonly understood. Things really exist, and the circumstance of the bounds of my accepted universe now widening to include them or some of them, and now contracting to exclude them, does not make the things exist or cease to exist.

A real world consisting of an infinite variety of things and relations exists. Of this universe I as a particular Centre of "stressing", make a cross-section which, too, apart from my ordinary pragmatic veiling or ignoring, is a universe of indefinite extent, now expanding and now contracting. The real universe is thus *doubly* treated: firstly, by a fundamental defining and measuring Stress (*Māyā*) whereby the real universe *per se* becomes a universe having reference to a particular "Centre" of special "play" (acceptance and rejection) in it; and, secondly, by the from time to time varying circumstances of that Centre's pragmatic acceptance and rejection. The individual is born out of a fundamental Stress, and, being born, itself becomes a stressing Centre—

its stressing being manifested in practical owning and disowning, or accepting and ignoring. This latter stress is *Avidyā*.[1]

The individual's universe, much less the universe as practically accepted by him now and then, is not, therefore, the whole real universe. And yet that whole real universe is not substantially unlike the universe he finds himself in. Things and their relations will, of course, be fuller and truer in the whole universe than in the latter kind of universe which is a "cross-section" of the whole. But hardly any solid grounds exist for imagining that the individual's universe is his own "idea" or construction only, having no essential resemblance to the real Whole.

Now, Experience or Fact is the name we have given (provisionally) to the individual's universe of realities. Experience or Fact does *not* represent the individual's "impressions and ideas" as distinguished from things and relations; it represents or rather is *actual* things and relations as "cross-sectioned" by the individual, *plus* his impressions and ideas about them. The *plus* represents an analytic operation made by the individual in his "Fact".

Since between *my* Fact and the *whole* Fact no disparity in essential nature exists, the same name, "Experience", has been given to the Whole also; it has been called "Experience-Whole". My experience being only a cross-section of this Experience-Whole, the latter is realizable in "a-centric" intuition which, as explained before, does not "dissolve" any Centre or all Centres in the Whole (so as to make it a-centric, undifferentiated), but is able to apprehend the Whole involving all its correlated Centres—the absolute Whole involving the "partial" wholes of the individual Centres—, without being conditioned by the "contraction" which central reference in

[1] The term "Avidyā" is commonly used in Vedāntic Literature in the sense of Māyā also. *Cf.* especially the position of the Eka-iīva-vādins.

the first place, and central pragmatic veiling and treating in the second place, implies.

Now since the Whole or Fact is Experience, it is what Experience essentially is. And, analytically speaking, Experience essentially, is a system of things and relations and a consciousness revealing and reflecting or representing them. More tersely, and still analytically speaking, it is consciousness and its object. Be it noted that we have not made this object an "idea". The Indian Sāmkhya System of Philosophy regards these two as independent of each other, and calls the first *Puruṣa* and the second *Prakṛti*. In this it gives no doubt the substance of a fundamental analysis of experience. The "seen" and the "seer" (not the "Ego"), the revealed and the revealer, are the two "poles" in which Experience no doubt splits itself upon an essay of analytic operation being made with regard to it. We shall not here discuss what grounds there may be or may not be for setting up the two poles as independent. They may be but the poles of a "Neutral Being". We have seen in the preceding lecture that for the "form" and the "matter" of experience, we should rather find out an identical root; and there *Sāmkhya* is with us—the *Prakṛti* is the common ultimate root of both. But what about Consciousness as such which, apparently, is neither form nor matter? Is it something absolutely distinct from the Principle—"matter-cum-form"? We shall not here take up this question.

Now this Consciousness as the revealer is an essential feature of *my* universe which is a cross-section of the Whole. We are entitled, therefore, to believe that it is an essential feature of the Whole also. In other words, the Whole is a Conscious Whole. Semi-conscious, sub-conscious and unconscious are pragmatically useful and important distinctions which exist for my universe or the cross-section; but they do not exist for the Whole *as such*. However paradoxical it

may seem to be, sub-consciousness and unconsciousness are "modes" of, and in, a Cosmic Consciousness. They pertain to all the acts of the defining and measuring Stress (*Māyā*) operating in that Consciousness, evolving Centres and groups of Centres, and defining their fields of correlation. In this sense we must entirely dissociate ourselves from the Philosophy of the Unconscious whether of the Schopenhauer or of the Hartmann type. Consciousness is not a special "swelling" of a Being-Power unconscious in itself.

To western thought, generally, Consciousness has appeared with both its extensity and purity hidden away. Consciousness is always and necessarily a "mode", a "state", a particular content: pure consciousness which is not a particular state, a particular determination, is an abstraction. Consciousness is as a perception, a thought, a desire or an emotion—a series or sum of these, a "stream" or, better still, a "continuum". But still, it is a continuum of features and particulars. The series or sum does not exist where the "terms" do not; the stream does not exist where the "pulses" do not; and the continuum does not exist where the features do not. The stream is, indeed, an improvement upon the series, inasmuch as it recognises the continuity of consciousness in protensity or duration; the continuum is a further improvement in so far as it recognises the continuity of Consciousness in extensity as well as protensity. Hence, though the extensiveness of Consciousness has been gradually emerging into recognition, its purity is not generally recognised in the west. Consciousness may be a continuum, but it is as a sea broken into a complexity of waves and foam. But the placid, quiescent sea?

The *Sāmkhya*, as we have briefly noticed, recognises a placid and quiescent "Revealer", and this, in one respect, is similar to the "Transcendental Ego" of Fichte and others with this vital difference that the essence of the latter is

activity whereby it *posits* both itself and the Non-Ego. But let us not linger over this. In all "schools" of Vedāntism, Consciousness in the sense of Cosmic Consciousness is recognised as a continuum—a seamless unbounded "expanse"; but with regard to the other character of "purity" (that is, featurelessness), there is difference of view-point. Rāmānuja in his *Srī-bhāṣyam*, for example, has taken considerable pains to disprove the position that consciousness is ever actually (that is, apart from abstraction) pure in the sense of being absolutely featureless, formless, determinationless. The common western psychologist will bear him company in this.

But does "pure" Consciousness exist? This we shall see as we proceed.[1]

[1] See *The World As Power* (Ganesh & Co., Madras) especially Vol. II, *Mahāmāyā*, in which the case of 'pure' and 'perfect' Consciousness is argued by us at some length.

VIII

ONE AND MANY

THE problem of "one and many" has been one of the central problems of philosophy in all ages. In the history of thought we find that stress has been laid now on this and now on that term of the relation. In Vedāntism stress has generally been laid on the aspect of fundamental unity, but within this *general* idea of unity, the idea of many has been given a place differently by different lines of Vedāntic thought. And since according to our conception, the Vedāntic thought is not something peculiarly Indian, but is the basic, "homotypal" thought (underlying even "magic" and so forth in the "lower" strata of culture), we may say that *no* type of human thought—however pluralistic, atomistic and serialistic it may have appeared to be in history—has been without an implicit or explicit recognition of fundamental unity in some form or other.

"The same stream in which we can never bathe twice" of old Heraclitus as also the "vital impetus" of Henri Bergson; the atoms of old Democritus and the Monads of Leibnitz; the series of impressions and ideas of Hume and the series of transient "states" ("Vijñāna") of the Yogācāra Bauddha—all these and similar philosophies, if closely scrutinized, will be found to imply a veiled recognition of unity in some form or other. The unity may figure as a "stream", or as a "series", or as a "field", or as a "continuum" or as a "system."

The fundamental basis of unity underlying all such ideas which profess to be atomistic, individualistic or pluralistic must be sought in the Fact—the undefined universe of Experience-Being—of which all our thoughts are necessarily more or less "veiled" and "treated" forms. The series of discrete terms as well as the "stream" with a running continuity are obtained by a veiling and treating operation of the original and ineffaceable Datum—the Fact.

We have explained before the Stress in the Fact which measures and defines. Clearly, such measuring and defining is necessary in order that the alogical Whole may assume the logical character of one and many: one and many being logical poles or correlatives. For a logical apprehension of this polarity or correlativity, not only must boundaries and hedges there be *in* the Whole, but a "view-point" or "frame of reference" must appear in the Whole which is competent to regard the hedges as hedges-in-the-Whole. A Whole with hedges in it may yet be an alogical experience; for a logical appreciation of it, we must have an appreciation of the *relation* —hedges-in-relation-to-the-Whole. For such appreciation a requisite "view-point" must be there in the Whole.

The Stress in the Whole which measures and defines must, therefore, evolve requisite view-points or frames of reference in it; in other words, it must not only define Experience-Being, but define it *with reference* to "Points" of appreciation. In fact, defining has no intelligible meaning apart from such points of appreciation. When A is defined, it can only mean that there is some point of reference, B, with respect to which it is defined. Defining is a relativistic idea. The wholly undefined and undefinable is the Absolute.

It follows, therefore, that the continuum of Being-Experience must be a continuum of points so that any surveying and mapping of its immensity may *logically* be possible. Not only so; to our understanding no measuring and defining

movement in the continuum seems possible without the continuum first having "resolved" into "points". The appearance of a point in the continuum is itself an appearance of discontinuity: the continuum becomes something special, individual, discrete in that point. This is so in whatever way we may be looking at the continuum—physically or "spiritually". The physical continuum of Aether must be conceived to have "vortex-rings", "intrinsic strain-centres" and so forth evolved in it, in order that it may be an actual basis for the material universe. Spiritual continuum or cosmic consciousness or sub-consciousness, again, must have evolved individual Centres of operation and reference within it, so that it may provide a workable basis for the system of varied experiences. A similar pre-requisite seems to be demanded in the case of the inter-linked life of the countless cells which are the units of the living world.

By thus evolving "points", the Whole, undefined and unmeasured in itself, becomes fit and ready for measuring and defining movement starting in it. The continuum is of infinite dimensions—not only the three dimensions of common space and the fourth dimension of time, but all possible dimensions are in it. This means that with respect to any given set of dimensions, or "co-ordinates" as the mathematician would call them, the continuum is undefined and undetermined. It *exceeds* but does not necessarily *exclude* the definition by any given set of co-ordinates. This is what we mean by saying that its dimension is infinity. It is *Bhūman* or *Brahman*.

Now, the point is "the vanishing point" of all dimensions. Its dimension is zero. These two limiting positions, viz. the infinite dimension and the zero dimension are, manifestly, needed to conceive and understand any quantitative "structure" of the continuum. Without these two limiting concepts, the concept of a continuum which involves varying magnitude

or measure becomes an impossibility. More or less, greater or less, higher or lower are concepts which hold only in a universe that has presented the two poles of infinite dimensions and no dimensions—everything and nothing (the point is the nothing of dimensionality).

But since the continuum of unfathomed and inexhaustible dimensions can never cease to be, the point of no dimensions has being only as a point in, and of, the continuum. This means in plain terms that the continuum of Being-Experience, while maintaining its infinitude of dimensions, so disposes itself as to become points of no dimensions.[1] It disposes itself between these two "limits", or "poles" as we have called them, and all intermediate values, measures and degrees, are the result of the negotiation between these two limits. Between the two limiting positions arises the "series" of measures and values. It is a logical self-disposition of the Fact and the terms "becomes", "arises", and so forth used in this connexion should not suggest a necessarily temporal or spatial process. Space-dimensions and time are only *some* of the possible co-ordinates with reference to which the continuum is or may be defined and determined; but in its immensity and inexhaustibility of being, it *exceeds* such partial determinations.

Since the "point" has no isolated, independent being, its being so, as that of all that is evolved from points, is polar or "binary" being—presenting two correlated sides, aspects or facets, to put the matter in pictorial terms. It is the continuum of infinite dimensions conceived to be reduced to no dimensions. From the one aspect, it is the All or Immense, from another it is the "Infinitesimal." This double or "binary" being is not merely a necessity of our logical thinking or conceiving. It is an arrangement in Being itself.

[1] Compare the idea of *Bindu* whose dimension is at once *full* and *nil*. This is discussed fully in *Japasūtram* (in six volumes) by the present writer.

The idea is this: It is not merely in conceiving that the point must be taken in relation to the continuum: it is the continuum and at the same time the possibility of the continuum appearing as not a continuum—a discontinuous, individual thing. The being of the point involves a contradiction thus stated; it *is* alogical, though it is the starting-point of the logical.

This double or binary character of the point we can express by saying that it is the *minus* or the inverse of the continuum. In saying this we are thinking of the analogy of 1/0 = infinity, a mathematical relation which, like others, has its basis in the fundamental relations obtaining in the Fact (as we have indicated and maintained in our *Approaches to Truth*).

The Continuum "posits" (to use a classical Fichtian expression) itself as the Point. This fundamental act is illustrated and repeated in every limited field alone also. The grown up plant or animal "posits" itself in this sense in a seed or germ which stands for the Point in these intermediate planes of being. The Mind-stuff posits itself in this way in the Ego or "I." The "atom", again posits itself in its "central charge." These "deputies" of the Continuum-Point in the intermediate planes are not the equivalents of it. That is to say, in any finite field or system of finite dimensions, we do not find either the Continuum or the Point presented at its full effective value— + infinity or —infinity. A fraction of the full effective value appears in such a system.

This means that in the Point the Whole changes its "sign" but does not cease to be the Whole; but in the finite systems it *practically* ceases to be so. To realize the full effective value, therefore, either the Continuum or its inverse (the Point) must be reached. And, as a rule, the nearer we approach the one "limit" or the other, the closer does effective value in a system approximate to wholeness or fullness. Over certain intermediate ranges of the scale, our pragmatic sense no doubt

appreciates effective values varying in direct ratio to smallness; but, in reality, with the shrinkage of the sphere or area of operation, operative value increases in intensity—that is, becomes greater per unit area or volume. The Point, therefore, must be conceived as the limit of perfection of the *intensivity* of effective value or efficiency as well as the limit of perfection of the non-extensivity of efficiency.

Stated abstractedly, such relations are difficult to grasp, but they can be sought to be proved *a posteriori* also. The actual universe of experience is a universe (continuum) of being and power (or efficiency): we are stating them separately, but we have hardly a right to set them up as separate entities. Now the contraction of the operative field of Being-Power is found to be accompanied by the augmentation of the intensivity of the Being-Power (or existent efficiency) per unit that field. The "lines of tubes of force", to borrow a familiar concept from the province of classical Electro-Magnetics, become more closely packed per unit field as the field is reduced. Thus a series is found of gradually decreasing extensivity of the field and correspondingly increasing intensivity of extent efficiency per unit field. What do we get when the field is infinitely reduced in extensivity and infinitely condensed in intensivity? That is the Continuum-Point or the Universe of Being-Power conceived as the Point ('*Bindu*').

This interesting idea of the Point need not be further developed here. The "Point-event" has already occupied a fundamental position in the Physics of the World to-day. The atom, corpuscle, electron, centre of force, gyrostatic strain, and so forth, appear to have been the intermediate unstable forms leading to this idea of the Point-event. In order to bring Biology and Psychology more closely and intimately in rapport with Physics, the "World" as well as the "Point-event" will, of course, require a conception of even higher syntheticity, but, already, the advance of Physics in the way

of fundamental world-conception has meant a positive gain in Philosophy.

Now, we come to the relation between the "Point" and the "Centre." Between the Continuum and the Point which are the two "limits," we have a series of effective values or existent efficiencies. We may conceive this series as born of the fundamental Elasticity in the Fact. Fact or the Universe of Being-Power strained into any form stresses to regain the original form: a law illustrated as we can see in the realms of Matter, Life and Mind. The Point is the Continuum strained (that is, condensed) into the form of maximum non-extensivity and maximum intensivity;—a strain that we before expressed as a change of "sign" or as one in which the Continuum becomes inverted. Since the Point is "the limiting position" of straining in this sense, it is also the limiting position of stressing to regain the continuum-form. In other words, *the state of greatest involution or condensation is also the state of maximum potency for evolution or expansion.*[1]

The intermediate values of efficiency may, accordingly, be looked upon as the intermediate positions reached by the Point in its essay to regain the Continuum form—the *minus* or inverted Form in its stress to "realise" the *plus* or direct Form. This fundamental stressing is illustrated in the mutual attraction of the positive and negative poles and charges; in that of the sexes down to the sperm-cell and the ovum-cell; in that of the Ego for its object or Non-Ego.

The underlying idea of the well-known Hymn in the *Ṛg-Veda* in which "Aditi" is stated to be the mother of "Dakṣa" as well as the daughter of "Dakṣa," is what we have explained above.[2] There is no doubt that "Aditi" (what is not divided or polarised) means the Continuum in the

[1] *Cf.* The mystic passage in the Ups. which says—Brahman, having evolved the world, *involved* Itself into it, and every little bit of it.

[2] *Ṛgveda,* X. 72. 4.

literature of the Vedas,[1] though this basic idea may be there in it in various "relative" forms also (*e.g.* "Aditi" = the stretch of the Earth, etc.). The term "Dakṣa" which literally means "what grows or evolves", means the "seed" or the Point as we have conceived it. "Aditi" being the mother of "Dakṣa" and "Dakṣa" being the father of "Aditi"—means, therefore, the Continuum of Being-Experience "condensing" or "straining" perfectly into the Point, and the Point stressing again to become the Continuum. Fact-Elasticity which expresses this phenomenon of involution and evolution is sought to be expressed by the paradoxical "myth" of "Aditi" being the mother of "Dakṣa" and "Dakṣa" being the father of "Aditi". "Dyauḥ" (translated as Heaven or Sky), "Pṛthivī" (translated as Earth) and "Antarikṣa" (translated as the 'space' between)—which are said to be the progeny of "Aditi" (the mother of the "gods,") are not, as we may further point out, crude conceptions, but they are symbols for opposite poles (such as opposite electric charges, opposite sexes, Ego and the Non-Ego, and so forth) and the separating "medium" between them.[2]

The Continuum in straining itself into the Point does not, as we have seen, cease to be the Continuum, and yet a change of sign or direction or order is thereby produced. This can be expressed by saying that a separating medium ("Antarikṣa") is created between them. And it is clear that this medium is not of finite dimensions—it is an infinite separating medium; so that an infinite stress is necessary to reverse the "sign" of the Point and make it the Continuum with the positive sign. This makes evolution in Matter, Life and Mind not only an unending process, but one behind which an infinite dynamism works.

[1] *Cf. Ṛgveda*, I. 89. 10.

[2] See our *Japasūtram* for detailed, systematic exposition.

That the Continuum and the Point in these senses are ever in a straining-and-stressing interplay—that, in other words, the former is ever condensing itself to be the latter and the latter is ever expanding or "swelling" to be the former—is a plan that we discern everywhere in the constitution and working of Nature. In the material world, the Point is "represented" so far by the electrons and protons and the Continuum ("Aditi") by the Æther or any other medium like this; in the living and feeling world too, the Point is masquerading as the "life-atom" and the "Ego" and the Continuum is represented by the "life-æther" (a common element of life) and the "consciousness-æther" (a common element of consciousness or "sub"-consciousness). In Biology and Psychology these "common elements" are not yet generally and positively recognised, but they are called for in the interests of science demanding a broader outlook and a wider perspective.

The recognition of the intermediate positions in the curve of involution and evolution is tantamount to a recognition that the Continuum as well as the Point have "relative" forms as distinguised from their ideal or perfect forms. The atom of matter is, in this way, not the perfect Point, but a relative form having a definite position in what we may call the "Point Curve" or "Point Series." The electron has another position—possibly somewhat nearer to the ideal position. On the other hand, the Æther of Physical Science or the Four-dimensional Continuum has a position in what we may call the "Continuity-curve" or "Continual Series."

Suppose we take a spring of wire of infinite dimensions and by means of an infinite force press it into a "point." Clearly, that point will be the position of maximum condensation of the Being-Power of the spring of wire. If we suppose further that the squeezing of the spring is a phenomenon happening in time and in some order of co-existence,

the process of the infinite coil of wire being reduced to a point will be represented by a *series* of positions, each analysable into the three co-ordinates of space and the fourth co-ordinate of time. This will mean that we shall have a series of coil-conditions from the condition of Infinite diffusion or relaxation to that of infinite condensation or potency. This series of intermediate efficiencies will give us an ascending series of intensivity, or what comes to the same thing, a descending series of extensivity. The "sense" of the series is reversed when we start with the "point-spring" and trace its gradual "uncoiling." There we get a series of point-condensations, the ideal or limiting position of which is the Point itself. The electron or corpuscle, the cell and its nucleus, the mind with its Ego—these all have their definite positions in this latter series.

The intermediate positions of Being Efficiency (as we understand them in the light of the above mechanical analogy) may be described as "crusts" or "sheaths" with reference to either limiting positions or ideal—the Continuum and the Point. In a vortex-ring atom, for example, the Point is represented no doubt by the centre of the vortex motion, but it is there as associated with a certain system of "sheaths" represented by the vortex. The central charge round which the electrons are supposed to revolve in the atom is, again, the representative of the Point; and the groups of electrons themselves in their different "orbits" stand for the "sheaths." Similar is the arrangement in a cell of protoplasm.

The individual mind is also similarly constituted. The Point is there represented by the Ego—the Individualizing and "I-making" Principle.[1] And round this is organized the Continuum in a series of consistency or concentration—giving it a system of "sheaths" or "crusts." A "sheath" is simply an intermediate position of Being-Efficiency lying anywhere

[1] Ahaṃkāra.

between the two ideal positions of Continuum and Point. Between the "sheaths" of one individual, A, and those of another, B, the difference is not in respect of *substance*, but in respect of the positions of the sheaths of A and B in the series. A is an arrangement for making a certain "section" of the whole series of values—for practically accepting the values P, Q, R, for example, and rejecting the others. B is an arrangement for making a section seizing upon M, N, O, for instance. A and B may partly or very nearly agree. Thus A = P, Q, R; B = P, Q, S, or P′, Q, R, and so on. In such cases A and B may recognise each other as of the same kind.

Now, such an arrangement of a Point "associating" with itself a certain kind of "event"-apparatus or "sheaths" in the Continuum, and, thereby, representing practically a certain value or position of Being-Efficiency in the series, is called a "Centre." And the "sheaths" practically thus associated may be called the "apparatus" or "body" of that "Centre". It is *unique* in this sense.

The apparatus or body of any "Centre" is thus a scheme for making a special selection from the totality of Being-Power. A Hydrogen atom is thus an apparatus different from a Helium atom; a vegetable cell is an apparatus different from the animal cell; the mind of a Kant as an apparatus is special in point of both action and appreciation.

The question of the Fact changing or not changing[1] has been shortly discussed by us in another place, and we need not now re-open it. We have seen reasons for believing that the Fact has a "no change" as well as a changing or moving aspect. Such reference in terms of aspects undoubtedly implies some kind of analysis and abstraction; but *any* thinking or talking about the alogical will imply this. No-change and

[1] Kṣara and Akṣara. *Cf. Gītā*, Chap. XV, 16, 17, 18; in Chap. VIII, *Akṣaram* is called '*Paramam Brahma*'.

change are "poles" of thinking, which cannot really be taken in isolation from each other. Emphasis may be laid now on this and now on that "pole" of the relation; and often this is determined by practical considerations or the dominating view-point and interest of the moment. We may, accordingly, speak of a "no-change series" and a "change series".

Pure Being and Consciousness, Power-to-be-and-to-become as such, the fundamental Types or "Ideas" (in the sense they were understood by Plato), and the Basic Causal Skeleton of the universe—are terms of the "no-change series". And amongst these terms—we are here not concerned with their *relative* positions in the series—a prominent one is this that the Continuum of Being-Power involves itself into the Point and the Point evolves back into the Continuum. This may be called the Law of Rhythm or Cycle, and it seems to be fundamental.

Persistence and repetition of certain Forms is not a less outstanding feature of nature-experience than change and appearance of novel forms. In the world of minerals it seems to be a correct position that "Nature left to herself always tends to build in crystalline form", and the crystalline-form, inspite of eccentricities and deviations from the pattern in individual instances, means a persistent form tending to reproduce itself in concrete instances. If the present view of the atomic constitution be held to be correct, it shows the atoms of matter to have an essential similarity of constitution which is commonly described after the "planetary" pattern. The ways of matter also fall into certain fixed groups which are called "uniformities" or laws. The "law of octave," for instance, has proved a very interesting and instructive law connected with the properties of the "elements". Coming to the changes of configuration of matter, we have, for instance, Newton's Laws of Motion and Gravitation and also

the amended forms (involving "tensors") required by the Principle of Relativity.

In the living world, Prof. Bergson's "creative impetus" notwithstanding, the feature that presses for an explanation more than anything else is "variation" rather than "reproduction" and likeness. Why are the individual members of a species not the exact "copies" of one another? Why do some members deviate from the species far enough to constitute what is called a "variety"? The hypothesis of the slow accumulation of slight modifications as well as the hypothesis of "mutation", presuppose a mechanism in the existing stock—or ultimately in the constituents of the germ-cells—which render the reproduction of Types not an absolute repetition.

In the world of sentiency, reflexes and instincts, and in the higher planes, consciousness of personal identity, represent, among other things, the element of persistence or fixity; but it is clear that coupled with this element there is also an element of modification or mutability, which renders evolution both in the sense of "ontogeny" and that of "phylogeny" possible.

We need not tarry over these illustrative fields any longer. The apparatus behind all concrete occurrences or instances in the world is a double-acting apparatus—having a "no-change" as well as a "change" component. This is a simple issue which has been often needlessly mystified in Philosophy. No ultimate gain is made in Philosophy by an attempt to deny either of the components—to dismiss either change or no-change as an "illusion". The true presentation of *Brahman* is an alogical one; but once a logical presentation is sought to be given, it ought to be perceived that *Brahman* is presentable to us in "poles" or "aspects" only of which "no change" and "change" (*Akṣara* and *Kṣara*) are a most prominent pair.

The Philosopher who "intuits" the Fact as absolute no-change, and he also who "intuits" it as pure change, movement, drift or "duration"—both go beyond the simple fact of intuition, which gives the Fact as unthinkable and unspeakable. Each has unawares cut up the "Aditi" or "Undivided", and makes 'her' Diti—the mother of the 'demons' (the 'quarrelling elements'). It is one of the commonest as well as the most dexterous feats of pragmatic "surgery" to operate on Experience under spiritual chloroform or other anæsthesia. Such operation, no doubt, has to be made upon Experience; or else, life as we have got to live it would be impossible. With the Whole or Entire, "life" has no business to do.[1] It is convenient, too, that the operation should commonly be performed under what we called "spiritual chloroform". But the philosopher must *note* that it has been so performed. Non-entry in his "note-book" has proved a fecund source of many a mistake and illusion. Nothing ought to be plainer than the continuous universe of experience at any moment—the Fact—, and yet, nothing has been more persistently ignored, not merely in lay appreciation and description, but also in psychology. Thus we are always having this or that sensation, this or that idea, this or that desire or emotion in our lives.

Nothing, again, is plainer than this that the Experience-Whole as such is the "indifference point" (to use an expression that became classical in Schelling's Philosophy and also in that of later Fichtian "Absolutism") of Subject and Object, Cause and Effect, Being and Power, Change and Persistence, and similar other "polarities". It is the Neutral Stuff as the Whole, though polarities may, and often do, exist with reference to defined and discriminated realms *within* it. Now, thought and discourse are possible not in regard to the Whole, but in regard to the realms defined in it,

[1] *Māṇḍūkya Up.* calls Brahman—"avyavahārya" ('unusable').

and that are defined *in the course of* the thinking and the talking.

There being a series of effective values between the Continuum and the Point, there will be a graded order of "Centres" and their apparatus in respect of Being-Efficiency. This will mean that a Centre, A, will possess an apparatus made of a material and involving an efficiency which, judged according to a standard practically settled upon, will be of a "higher" value than that of another, B. In this way, an animal possesses an apparatus of "greater" value as compared with the plant; the plant of a greater value as compared with the crystal; and so on. The manifestation of apparatus of higher and higher effective value is the meaning of progressive evolution.

The apparatus or body of A itself may not be "homogeneous" in texture and distribution of efficiency. Since every apparatus represents a particular position in the series of the Continuum condensing itself into the Point, or inversely, that of the Point "swelling" into the Continuum again, its structural as well as functional composition will be a certain ratio of the involution and evolution of the Continuum or of the Point. Thus one apparatus, A, has this ratio (*i/e*), represented in its structure as well as in its efficiency in a manner different from that in which the ratio is represented in B or C. Since, again, apart from this ratio (*i/e*), A = the Continuum or the Point, that is, the perfect universe of Being-Power either in extensity or in intensity, we have A = *Brahman* = *Bindu* ("Point"). But, practically, it represents a certain position in the scale of involution or evolution—a certain ratio of *i* and *e*. Hence, structurally as well as functionally, it represents a certain ratio of the Continuum of Being-Power. Which means in plain language that the Infinite Being-Power is involved in A to a degree and is evolved in it to a corresponding degree. A floating ice-berg conceals nine-tenths of its whole mass in the

depths of the sea and reveals the remaining one-tenth: this represents the ratio of *i* to *e* in its case. A vast amount of force is "static" in the atom in ordinary circumstances, and this static, equilibrated energy becomes kinetic in radio-activity or in 'fission' or 'fusion'. In every material "apparatus", energy is given in "static" as well as in "kinetic" state, and it is the ratio of these two that determines its actual behaviour. The life of the living cell consists chiefly in transforming kinetic energy into latent or potential form and the transforming of this latter again into the former. This is the essential feature of cell-metabolism. The function of the special glands (pituitary, thyroid, etc.) upon which the investigations of Blyss and Stirling and others threw so much light, is a more emphatic and interesting case of this energy involution-and-evolution. In the ordinary cells of the body, the ratio *i/e* is apparently represented by a "low" figure, but in those groups of cells that are called the pituitary and other glands, the ratio is remarkably high: so much seems to be latent in these glands that its becoming patent or released in part is followed by very marked structural and functional changes in the organism.

The mind (as venting itself in a threefold stream of torpor, instinct and intelligence —to borrow Professor Bergson's classification—) is, also, apart from all theories dating from the time of Descartes and his followers that have conceived the organism as an "automaton" or machine, a "tap" through which incalculable energy is being apparently drafted into the universe of matter; a volition in the mind becomes, for example, a source from which, apparently, much energy is introduced (some would prefer to say, "released", others "redirected") into the nerve machine, and through that into the surrounding system. Memory, attention, and so forth, show that Power involved in the Mind is being evolved. So that on the strength of these *facts*, which no theories can afford to explain away, we may say that the Mind, too,

represents a certain ratio of *i/e* of the Cosmic Fund of Being Power.

Now, it means that in each "centre" of these types we have "the floating ice-berg" condition illustrated as regards substance and energy. That is to say the apparatus or body of every centre consists of a series of "sheaths"[1] or "envelopes" in and through which the Cosmic Being-Power has both involved and evolved itself in a given manner. In any given type of apparatus, A, the envelopes (for involving and evolving Being Power) have a relatively equilibrated condition, but there is no permanent equilibrium. The atoms of matter were, classically, the "indestructibles"; in fact, it was considered to be one of the merits of the Helmholtz-Kelvin "vortex-ring" atom that, on hydrodynamical considerations, it was proved to be neither "naturally" creatable nor naturally destructible. But the "spontaneous disintegration" in Nature as also the later 'voluntary' disintegrations of radio-actives in the laboratory, of the atom which is now evidenced in radio-active phenomena, is evidence that the atom represents but a condition of relatively permanent equilibrium of mass and energy. What is true of the atom is true to a more pronounced degree in the case of other kinds of Centres. The life of each is a life of ceaseless activity and ever wakeful dynamism. There is no absolute "torpor" or "inertia" anywhere.

The two terms of the ratio *i/e* are both variables and not constants. The ratio *r*, varies not merely from A to B, and from B to C, and so on, but it varies in A itself. Hence if we represent the structural and functional apparatus by the equation $A = f(r)$, we must have different values of A corresponding to different values of *r*. But the curve of the variability of *r* remaining within certain limits, we may, practically, regard A as remaining the same A. The consciousness

[1] Kośa.

of the "identity" of concrete substances is, therefore, a pragmatic consciousness. The envelopes are of a varying degree of involution-and-evolution index. Physicists speak of "the refractive index" of a given medium as compared with another, *e.g.*, air and water. So also we can speak of the "in volution-index" or "evolution-index" of a given envelope as compared with another.

Every Centre has a system of envelopes, each with an evolution-index of its own. And since the Centre is really = the whole Cosmic Being-Power in a certain position of its involution and evolution, we can legitimately think that in each Centre the Cosmic Being-Power is represented by an *infinity* of envelopes. But practically only a few of these are "requisitioned" by the Centre in question. Since, again, the Centres form a correlational system, the question as to what envelopes are and what are not "requisitioned" in a given case, will have to be decided with reference to three view-points: (*a*) the view-point of the Whole: (*b*) the view-points of a given Centre itself: and (*c*) the view-point of other Centres that are in conventional co-operation with it. From the first point of view, each Centre possesses an infinity of envelopes: from the second and third, it possesses but some. But in these latter cases, there may be a difference. A lump of "brute" matter practically "presents" to us but only one envelope—what we appeciate as inert, ponderable, impenetrable matter. It does not *not* present to us the "life-envelope" or the "mind-envelope." But this does not necessarily mean that in itself, and to itself, it possesses the one envelope only; or that with a change taking place in *our* apparatus of appreciation and convention, it may not present to us the life and mind-envelopes hitherto unrecognized in it.

We have elsewhere[1] defined the *Adṛṣṭa* of a particular Centre as the character it possesses by virtue of its *position* in

[1] See *The World as Power*, in two volumes, before referred to.

the cosmic system, and its *Karma* as the activity by which this position is ever sought to be altered.[1] Every centre is a *function* of the ratio between these two—*a* and *k* (nearly analogous to the anabolism and catabolism in cell-metabolism). The apparatus of a Centre varies as the ratio *a/k* varies. Now, suppose, we take two centres, X and Y—a conscious entity like myself and a lump of matter. Omitting all other Centres, we may say that the character of Y—namely, whether it is "living" and "conscious" also—will depend upon four things —(1) the *adṛṣṭa* or "positional index" of Y, (2) the *karma* or "kinetic index" of Y, (3) the positional index of X with reference to Y, and (4) the kinetic index of X with reference to Y. So that with a change materially affecting any one of these conditions, we may expect to find a change in the character of Y. The question of envelopes therefore, reduces itself to a question of conventional view-point.

Since the *Brahman* has involved itself in every-thing,[2] —the Continuum involving itself into the Point and the Point evolving as all things—, it follows that distinctions between Matter and Life, Life and Mind are due to their positions in the infinite curve of involution and evolution. And it is important to note these positions are determined by the action of the Continuum involving itself into the Point, and the reaction of the Point evolving to become the continuum again. These two are the components producing the resultant position. The actual "position" of a plant, for example, is determined by the action or impetus of the seed to become a full-grown tree, and that of the full-grown tree to produce the seed. The "forward sweep" and "backward sweep" the outgoing current and the return current are concurrent in every case, but their ratio varies. And the varying ratio

[1] *Cf.* Dik and Kāla in *Nyāya Vaiśeṣika*.

[2] "Tat sṛṣṭvā" etc.—*Taittirīya Up.* before cited.

determines the actual position in a given case. Stated in other terms it is the 'co-efficient' of elasticity. A man and an amœba, an amœba and a block of stone thus have varying co-efficients of elasticity which assign them different positions in the cosmic economy.

The Continuum is the *Brahman* with the *plus* sign, and the Point is the *Brahman* with the *minus* sign; and a "circuit" of movement is established between them. The position of anything in this circuit or curve is determined with respect to *three* co-ordinates—the co-ordinate of the involution and the co-ordinate of evolution—these two *general* co-ordinates; and a third *special* co-ordinate which we suppose to be the *Karma* of the thing itself whose position in the circuit we may be investigating.

The difference of "sign" between the Continuum and the Point may be supposed to be expressed as a difference of "pressure" or "potential". The Continuum involves itself as the point in order that there may be a "field" with an infinite difference of potential or pressure; and this difference is needed for "flow", "current" or movement. *Jagat*, which comes from a root meaning "to move" or "to go", becomes possible only in so far as a such field of different pressures or potentials is created. A perfectly equi-potential field is a condition of equilibrium and quiescence.

We are not thinking of the Fact after what one may be inclined to suppose mathematico-physical analogies. These are not analogies but illustrations of Fact-conditions: the difference of potential, circuit etc. being physical interpretations of conditions that are not non-physical, but *more* than physical. So, again, the fundamental laws of Matter are illustrations in restricted realms of laws that obtain in the universe of Experience-Whole itself. Just as in Physics we have to-day the "Generalized Principle of Relativity" so in the Science of the Fact we should expect to meet "generalized

principles" which have their special applications in the realms of Physics, Biology and Psychology.

The special entities—Matter, Life and Mind—treated in these sciences are "co-substantials" and "co-efficients" so that Mind, for instance, may be regarded as matter "in the sixth or seventh" state, just as Matter in the form of electrons was regarded as "Matter in the fourth state" or "Radiant Matter" by the late Sir William Crookes. The imponderable æther, which was later believed to be a *quasi*-material medium by its adherents, is also matter in a still higher state—possibly the "fifth". Some fundamental laws of matter such as the laws of motion are found to hold good in the realm of the fourth state, and are believed to hold good in that of the "fifth"—the æther. Of course some of the laws have now to be restated in terms of Relativity ideas. But in every case it is but reasonable to infer that such "generalized" and "purified" laws and principles will apply to the realm of the sixth and seventh states also—in fact, to the mind. Thus such ordinary processes of the mind as perception and volition must be understood on what we may call a "physical basis", and on the other hand, such physical phenomena as orbital motions of the electrons in the atom or possibly even the orbital motions of the planets round the sun must be understood on what we may call a "psychical basis".

We have studied the Vedāntic theory of perception as illustrating this rapport of Physics and Psychology in another place.[1] Here we observe this: Being-Efficiency is one and continuous, but it presents itself as an infinite series or rather as a "circuit" with oppositely signed "currents" or "flow". Now, some of the terms of this series—that is, some planes of Being-Efficiency are pragmatically looked upon as constituting "matter", and certain others as constituting "life" and "mind". These are convenient labels attached to some terms

[1] *The Power As Mind* in *The World As Power.*

of the series or some positions of the continuous curve of Being-Power as distinguished from some others. As we have before explained, with a change in the angle and direction of the "orientation" of the apprehending and appreciating Centre, these labels are likely to change also.

As in "mathematical induction" we infer from certain relations obtaining in some observed terms of a series to terms not observed or demonstrated, so, we may suppose, we can infer from certain fundamental relations actually holding good in the "realm of matter to those relations, also holding good in the "higher" realms of matter. Of course it may not be easy to decide what principles are and what are not "fundamental" in physics, but a presumption ought to stand that *every* principle found to hold good in matter will also be found to hold good in life and mind in a "generalized" form —unless the contrary be found to be the case. And it must be remembered that our "hypothesis" of certain terms of the "matter series" may be one thing and the actual terms themselves may be another thing. The Dalton hypothesis of the atom started with hard, invisible and indestructible corpuscles; the Æther hypothesis, again, generally imagined an imponderable substance which yet possesses inertia; and so on. It was naturally thought, therefore, that certain relations (for example, "transmutability" and "destructibility") did not apply to the atoms; that certain others did not apply to the æther. These were excluded by the very "terms" of the hypotheses framed. But were we, after all, justified in framing hypotheses on those terms?

We do not propose to pursue this subject further at this stage. We said that the position of any thing or "Centre" in the curve of involution and evolution will have to be determined with reference to three co-ordinates. The "outgoing current" and the "return current" are two of the co-ordinates, as we have seen. This, in plain terms, means that

every "Centre" is caught in an infinite circuit of movement which in the Vedānta is called *Saṃsāra* or *Saṃsṛti* (from the root, Sṛ = to move). It is a cosmic impetus and movement, into which every Centre or being is "drawn" or rather, of which the movements of all things are the components.

But does this imply either that the cosmic circuit is a mechanical spinning round and round or that the movement of any "Centre" is a purely determined element of that cosmic movement? Does the cosmic plan exclude both novelty and freedom?

That there are cycles in cosmic affairs and that particular Centres are in those cycles—is a fact which no amount of metaphysical mystifying ought to obscure. But, on the other hand, it ought to be plainly recognised also that the essence of the being-activity of the Cosmic Impetus as well as of the "life" of any Centre in the cycle or circuit, is spontaneity and freedom. It is *Līlā*, *Krīḍhā* or Play, as the Upaniṣads never tire of telling us. *Brahman* as such is "playful"—and this must be understood in the fullness of its significance: It is playful as the Continuum. It is playful as the Point. And it is playful in every position in the involution-evolution circuit between the Continuum and the Point. It is so because the essence of Being is *Ānanda*—an untranslatable word like *Cit* and *Sat*, but which we may partially render as "Joy". The cosmic circuit and a Centre's being in that circuit does not, and cannot, make that Centre forfeit its "birth-right" of Joy and Freedom which is the effective index of Joy. Play is its effective manifestation.

This basic idea of *Ānanda* and *Līlā* (Joy and Play)—in which we touch the keynote of the philosophy of the Upaniṣads—has been slightly developed by us in another Chapter, and more fully in other books. Here we note that the third —and in one sense the most vital—co-ordinate defining the position of any Centre in the cosmic circuit is the "Joy-Play"

of that Centre itself.[1] Pragmatically this factor of Joy-Play of a Centre seems to be conditioned by the stresses of the cosmic circuit; but it is never annulled or suspended. Any Centre, though it *has* to behave in a certain way by the circumstances of the "assigned" case, has also the inalienable right to behave as it pleases, and this right *is* ever more or less exercised by it.

If it were really a finite, small thing, we might expect it to be "caught" in the net of cosmic determination; but it is only pragmatically and conventionally a finite, small thing. Actually it is the Continuum-Point in a certain position and posture of its "free hide-and-seek", involution-and-evolution Play—a process undoubtedly involving rhythms and cycles, but also original and novel impetuses. Its (that is a Centre's) *play* and *freedom* is really the *freedom* and *play* of the Continuum-Point: a statement which does not mean that a Centre is but a "toy" in the hand of a Power transcending its being, but it is, being of the essence of that Power, its own master. Pragmatically, the "toy-view" often prevails; so that we distinguish between the "toy-Centre" and the "Master Centre", and call this latter—the Continuum-Point as such—the "Antaryāmin" ("Inner Controller") or "Paramātman" ("Super-Soul"). Really, this is a distinction without any but pragmatic difference.

[1] Karma.

IX

THE PRIMARY BASIS

BEING-Consciousness-Bliss with its characteristic effective manifestation—"Play", is recognised by the Upanishads as the essence of Being-Power in any form. The idea of "Form", —"continuum", "Point", "Centre", "Apparatus"—we have tried to develop in another lecture. By a "Form" the Being-Power is, or may be, variously "veiled and treated" no doubt, but in essence—that is, as regards Being-Consciousness Bliss and Joy-Play—it never ceases to be itself. This means that in *any* form of being, say, a lump of matter, these essential characteristics are given. In fact, characteristics may be, from our limited and pragmatic point of view, considered as variable and as invariable. The former may be in some forms but may not be in others; but the latter are in every form. Since, however, any form is really a form of the Continuum-Point—since it represents a position of the Continuum involving itself into the Point and the Point evolving to become the Continuum—, it follows that every form is *really* (that is, apart from pragmatic limitation) the Whole: in other words, it is a "monad"—a free and playful monad *having* "windows"[1] for communicating with other monads. Through these windows, however, monads ordinarily hold *partial* parleys with one another; hence, pragmatically, each appears as a "section" of the Whole, including some features and properties but excluding others.

[1] *Cf.* Leibnitz.

Yet there are certain characteristics which we may regard as fundamental or essential. The red of the rose flower is apparently not in the green of the rose leaf, and *vice versa*; and yet, both the things have weight, extension, inertia, motion, and so forth. The question is a question of "common denominator" as between the petal and the leaf. A group of characters will represent that. Then, a third object may be taken into account, and we may try to find the common denominator of these three things—A, B, C. And so on. Now, our point is that Being-Bliss-Consciousness and Play represent the universal common denominator of all forms of existence. Thus even a particle of dust or a drop of dew is a measure of Joy-Consciousness and an apparatus for Play. And it is a measure[1] only with respect to our ordinary "frame of reference" the frame of convention. Else it is the Whole.

In fact, the frame of reference with respect to which a thing or fact is measured and defined is several, and not one. The world of "objective" realities is constituted of things and relations as determined by the *free* involution-evolution Play of the Continuum Point. By "free" is meant that the cosmic process is not a dreary, monotonous folding and unfolding, but that in every detail as also on the whole there is freshness, novelty and originality. Prof. Bergson's philosophy has done a great service to the cause of truth by bringing this aspect of evolution into strong and clear relief. Everything is something new; every fact is also something new. But the type and the rhythm are also there. Plato's contribution to truth is also *real* and *abiding*.

It is not that typal and rhythmal conformity only is ensured by the cosmic Stress leaving to the individuals some margin or latitude for initiative, departure and play; in other words, we are not to understand that the "law-abidingness"

[1] Mātrā

of things and facts in the world is due to a cosmic component and the eccentricities and playfulness due to individual components. No sharp division of dynamism should be thus contemplated. The cosmic Stress binds and yet does not bind; it can circumscribe but not efface the inalienable right of things to be and act as things in, and of, *Brahman*—as "points" through which the Cosmic Being-Bliss-Play Principle vents itself as individuals or particulars. In so venting, it measures and defines Itself no doubt, and measuring and defining proceed according to "law"[1]; but nowhere in this process does it surrender or lose its essential character which is Being-Consciousness-Bliss-Play.

The other frame of reference is that of the individual Centre itself, and there are as many different frames of reference as there are individual Centres. A number of Centres, A, B, C, D, ... may, however, form a class, so that their frames of reference, without being coincident, may overlap and agree. So there is what we may call our "normal universe of convention". Certain values have actual or possible "currency" in this our market of convention; others have no such "currency". A grain of dust, for example, may really be a "Centre" of Being-Bliss-Play, but the two latter terms Bliss-Play have no currency in our common "Stock-Exchange".

The scientist's "Stock-Exchange" is not the same as the layman's. And in Science, too, there is not one unvarying frame of reference. The frame of reference, as defined by the improved methods and instruments of observation, experimentation and calculation (*e.g.* the Relativity Calculus) in the twentieth century substantially differs from that of the preceding century. Practically in every sphere, new findings and indications have been the harvest reaped in the fields where these improved methods

[1] Ṛtam Satyam.

and instruments have been applied. And, surely, nobody will claim any finality in these methods and instruments —that the present "expert" frame of reference is sacrosanct and inviolable. The ubiquitous "series", therefore presents itself as regards these partial and "progressive" frames of reference: we have "frames" corresponding to the conventions of A-class, B-class, C-class, and so on; these "frames", judged according to a standard of evolution, may be considered as higher and lower; what, then, is the "frame" in its "limiting position" or perfection? This question, we may passingly remark, has been at the root of "Revelation" or *Veda* (from *vid* = to know) which the Vedānta accepts, in common with many another ancient thought, as its last and supreme authority.

Barring this "Limit", we have a multiplicity of frames of reference, and we have really no right to reserve "frames" for ourselves only, or for the higher vertebrates. To deny "frames" to the lower species of animals, plants and minerals, is practically to beg the whole question that in these Consciousness-Bliss-Play aspect of Being-Power is non-existent or undeveloped. It is the non-existence or latency of this aspect or expression that is the subject of proof. If this be proved, the dust-particle or the dew-drop is not a frame of reference in the sense we are: but if this be disproved, it is. The question, therefore, is this: Are there general proved, or self-evident premises from which the fact of a dust-particle having Consciousness-and-Joy-Play of its own can be deduced? Or else, are there signs or indications which may enable us to infer the possession of this by the particle? If this possession be proved, the particle shall have its own frame of reference; its Joy-play or *Karma*, and, therefore, its own component in the resultant position it occupies in the cosmic system.

The general premises are supplied by the "Theory" of the Fact or Experience-Whole that has been outlined. Every

Centre is a Centre in, and of, this Experience-Whole. A Centre, again, is a special position of the Whole regarded as the Continuum and as the Point. Now, if the Whole be essentially Being-Consciousness-Joy-Play, the Continuum-Point is also so; and the Centre, as a special position (especially measured and defined) of the Continuum-Point, is so also. In order that this conclusion may be true, two propositions must be true: (1) the Whole is essentially what we represent it to be; and (2) the special defining and measuring by which a particular Centre is got, does not make that essence cease to be in the section defined and measured.

If we consider the *nature* of the defining and measuring operation in Experience, we find that it is only "veiling" of the actual given and not its effacement. In other words, the actual whole of experience never ceases to be such, when by an "apparatus" a cross-section is made from it, and that cross-section regarded as *the* experience of the moment. Veiling means the ignoring of what is actually given in, and as, experience. Of this *three* kinds should be distinguished: (*a*) the veiling of actual experience by the pragmatic interests of a given Centre itself (*e.g.* in the case of my perception of the star Sirius in a glance at the sky at night); (*b*) the veiling of the actual "life" of experience of a given Centre by another Centre or group of Centres, for example, I, representing a particular pragmatic apparatus for special kinds of apprehension and appreciation, may "acknowledge" but a part of the actual life of an animal, a plant or a mineral, and ignore the rest. It is evident that with a change in my apparatus or frame of reference, the mode as well as the extent of veiling of another Centre will also change.

Hence if we represent the acknowledged or recognised part of a Centre's actual life by y and the stresses constituting my apparatus of apprehension and appreciation by x, then, clearly, $y=f(x)$: that is, y varies as x varies. And as in

mathematics we have an expansion-series (as defined by the Taylor's Theorem, for example) of a given function, so here also, we have an expansion series of the values of $f(x)$; and it is an interesting consideration how these values change as those of x change. And particularly interesting is the case in which x is put = the Continuum-Point itself. There the question is this: what is the actual life of a given Centre, y, as apprehended and appreciated by the Continuum-Point "apparatus" or frame of reference? This question answered gives us the *complete* reality of the life of y. The complete appreciation of the life of a Centre or totality of Centres means its "*Veda*". And we may say at once that our "Continuum-Point" is what in the "older" Vedic literature (*Samhitās* and *Brāhmaṇas*) figures generally as "*Prajāpati*" or the Lord of the Created, and latter as *Īśvara*" (or Lord).

Now, the two kinds of veiling above explained related to inter-central convention and transaction. We assume that there are a number of Centres in the Continuum; and then enquire as to what is meant by these Centres bargaining with one another. Such bargaining presupposes, as we have seen, that there are a number of special apparatus for apprehension and appreciation (by "apprehension" we mean what a Centre *cognises* or *feels*, and by "appreciation" we mean what it *recognises*, *judges* or *accepts*). These give us special cross-sections of the Fact, and the Fact is variously veiled and treated in them. Now, the veiling incidental to such inter-central convention and transaction is the ordinary kind of veiling which, in the Vedānta, has often been called *Avidyā* (non-recognition).

But we have assumed that Centres are already there in the Continuum. A centre we have defined to be a position in the involution-evolution circuit of the Continuum-Point -- a circuit in which Continuum-Point, without ceasing to be itself, freely stresses to involve-evolve itself in an infinite *curve*

of positions, the "value" of each being defined, as we have seen, with reference to three co-ordinates, the third of which is the "Joy-Play" of the positional existent (a Centre in a particular "position") itself. The "position" is in a Continuum of we do not know how many dimensions, but of which the three dimensions of Space and the dimensions of Time are *some*.

But a positional existent is not defined exclusively by its "Joy-Play" (or *Karma*) alone. It is defined by a cosmic component also. In other words, a Centre is constituted a Centre, a positional existent is made as such, by cosmic stresses. *A posteriori* also this seems to be the case. A particle of dust or a dew-drop has an individual being of its own, and the "centre" or "nucleus" of the individuality is represented by the Point operating in, and as, it—this is perfectly "condensed" Being-Power (*Brahman*) operating in, and as, it. This nucleus of individuality is *the infinite potentiality of Joy and infinite capacity of Play*. But this nucleus is practically—that is, with respect to the frame of reference of the involution-evolution-curve—determined by extrinsic or environmental factors also. So that if these factors do not exist or be altered, an individual object will not practically be what it now is: a dew-drop, for instance, is not a dew-drop in an enveloping world in which certain conditions do not exist or exist in an altered form. And the enveloping order being an "interlocked" stress-system leaving no real zones of isolation, the introduction of a new condition or the elimination of an existing one *anywhere* in the unbounded system, will affect the dew-drop. In treating of an actual dew-drop on a yonder rose-petal it may be convenient to limit our data of conditions practically to those in the neighbourhood or those that have a "large" share in the occurrence of the phenomenon. But this is a pragmatically useful but not scientifically safe procedure.

The dynamics of Galileo and Newton still practically hold no doubt; but with the advent of relativity ideas it has now been found to be a "first rough sketch of Nature". So our ordinary account of the dew-drop may only be a rough, summary account which, with the march of theory, requires to be "filled in, corrected and amplified". All scientific methods are necessarily, in our planes, methods of approximation proceeding upon "limitation of the data". The gravitational stress between two things is easily calculable (according to Newtonian laws); with the introduction of a third body, the problem (as attacked by such mathematical geniuses as Laplace) becomes highly intricate: but what are the mutual attractions of *three* bodies in a universe consisting of myriads? The actual immensity of the problem transcends all finite methods of Calculus. Very powerful methods as represented by the Differential and Integral Calculus, the Calculus of Variation, the Quaternions, the Theory of Probability, those of Metageometry and Relativity, and so forth, have no doubt been requisitioned from the armoury of *Māyā* (the "Measurer") as operative in the human brain; but what are these methods by the side of the infinite magnitude and complexity of the problem as represented by a "tiny" drop of dew or an exploding atom?

Everything is a member of universal stress-system: its membership implies not merely that it is, in being and in efficiency, in-isolable from the universe, but that it is, in a special sense, the Universe. In this way, it may be called a "monad". In accordance with the phraseology we have used, any "Centre" represents a definite stage or position in the Continuum "straining" itself into the Point, or inversely, the Point "stressing" itself into the Continuum.

With reference to a certain realm of convention, the Point-Aspect (that is, involution, folding) may be more emphatic than the Continuum-Aspect (evolution, patency, unfolding,

manifestation). As in the Relativity Theory we speak of a "space-like" event or a "time-like" event, so we may speak of a "Point-like" Centre or a "Continuum-like" Centre. If we put Presentation (with respect to a given frame of reference = P, and non-presentation or Veiling = V, then, the latter may be described as a thing of P-emphasis, and the former as one of V-emphasis. In certain phenomena, again, the striking note is transition, flowing or moving rather than substantivity or stability. These we call motions or processes. Putting Movement = M, we may describe a process as a phenomenon of M-emphasis. These notations we have developed and especially applied in our *Approaches to Truth*. These world-notations of P.M.V. form a part of the fundamental "vocabulary" of Indian Thought; these are the famous *guṇas—Sattva*, *Rajas* and *Tamas* respectively. Evidently, P.M.V. are the components of the Supreme Measuring and Defining Impetus (*Māyā*) we have discovered as operating in the bosom of the Fact or Experience-Whole.

Now, V is the inverse of P. Representing the "sense" of P by the positive sign, we can represent that of V by the negative sign. This means that in things of V-emphasis with respect to a certain frame of reference the "sense" of Being-Efficiency is opposite to that in things of P-emphasis. This difference of "sense" or sign is implied in that between the seed of an oak and the grown-up oak, between a field of kinetic energy and one of latent, statical energy. In such cases, the opposition of sign is easily recognised.

But it is not as readily recognised that a grain of dust or a drop of dew is, also, with reference to our ordinary standpoint, a thing of V-emphasis. And yet Science shows that it is, in one sense, so. Millions of molecules (sometimes diagramatically arranged, as for example, in crystals) are "conglomerated" there in that grain or drop. We do not commonly suspect that it is so. Again, within each molecule atoms are

arranged in more or less complicated configurations (as for example, in the benzene molecule). To our ordinary, lay vision all this "scene" remains folded up. Then, again, within each atom we have a "planetary system" of protons and electrons—an atomic universe lately discovered. This shows that the constitution of the dew-drop is from our common pragmatic point of view, a constitution of V-emphasis. The "sense" or sign of this is changed –V becomes P—to the extent that the drop of dew actually or analytically "evolves" into a veritable universe. To that extent, a "Point-like" Centre becomes a "Continuum-like" Centre.

But it may be thought that Physics, though it shows us the dew-drop with its "sign" changed in the sense above explained, does not yet show us that it is a "Joy-Play" Centre. It does not yet; but we cannot dogmatize about what Physics may or may not show us. Already, beginning with the close of the last century, Science has been showing us too many unsuspected wonders hidden in the "small" as well as in the "great" things for us to remain light-heartedly or doggedly sceptical. The surprises, Science has "flung upon" us, have certainly raised in us an expectancy looking out for more.

It will not do to urge that the new discoveries have all tended to show the grain of sand or the drop of dew to be more and more "material" and more and more "mechanical". Nor can it be urged that the "materialism" and "mechanism" of Physics have spread and engulfed both neo-vitalism and neo-Psychicism in the realms of vital and psychical phenomena. To some people, it has been well said, science has always been "exploding" one thing or another; but what other things it may or may not have exploded, it is certain that it has not exploded—and is not likely to explode—the pristine mystery and wonder of existence, in "small" things or in "great". As we heard Prof. Eddington

say in another place, the ultimate groundwork of Physical Science is now, with increasing clearness day after day, being perceived as both indefinable and unmeasurable; and even such "current coins" in physical theory as Æther, Electricity, Force, and so forth, have not ceased to be enigmas and inexplicables on account of their currency. Assuming that Physics is able to state everything in terms of the "material" and "mechanical", these terms themselves are now found to be more and more undefinable and unstatable.

Science to-day absolutely refuses to erect a dead buffer against the ancient human quest after the mysterious, the uncommon, the miraculous which has inspired and impelled magic and religion, mythology and metaphysics in all ages and countries. Pantheistic "animism", which appears to have lain at the basis of ancient magic and religion, was all but "burnt to ashes" by the "purifying" fire of rationalism and positivism, but indications are already clear that, like the fabled Phoenix, it is destined to rise from its ashes stouter than ever.

To the "mystic vision" which would still discover an unfailing Fount of Joy-Play in a dew-drop, Science to-day can hardly afford to oppose an absolute or categorical contradiction. On the contrary, the undefined and unmeasured groundwork in which Science ultimately lands us in its analysis of the material universe (not to say, that of the living and feeling worlds) provides a not merely possible but promising framework for constructing a pantheistic animism of the type represented by the Vedānta.

That type of pantheistic "animism" we have already stated to be this: Every Centre—whether a dew-drop or the soul of a man—is the Continuum-Point (=Being-Consciousness-Joy-Play-Immensity) at a certain "phase" of its infinite curve of free involution-evolution, straining and stressing. This in plain yet mystic language expressed by the well-known

text in the Upaniṣads which says "All things live in a measure of this Immensity of Joy."[1] A grain of sand or a drop of dew is so also. Its being and its acting is a "measure" of the Immensity of Joy (a term that we have been employing for the untranslatable word, *Ānanda*). A "measure" means the Immeasurable measuring or finitising itself—a certain position or phase of the curve of the Continuum freely involving itself into the Point or the Point freely evolving into the Continuum. The Continuum and the Point both are the Immeasurable, though they are of different "sign" or "sense".

The basis of such "pantheistic animism" is to be found in the Fact itself. We have an immediate consciousness of a universe in which we ourselves are in action and reaction with countless other Centres: this is no theory or inference, but an immediate deliverance of Experience itself; we have called it, accordingly, a *finding of the Fact.* It is true, of course, that the universe of experience, as we live it at any moment, is a universe that is both veiled and treated—one from which many things remain screened away, and one in which "elements" are more or less pragmatically dealt with—; yet between this universe and the larger, the difference cannot be one of kind—the latter being, for example, a world of unknowable "thing-in-itself" which (to use the phraseology of H. Spencer's Transfigured realism) is, at any moment, reflected on the "curved mirror" of the experience in a "transfigured" and "cross-sectioned" manner.

There is no essential dissimilarity between the *actual* universe of a Centre and what we may call its *possible* universes, that is, the larger universes we get by making both V (veiling) and T (treating) components approach as near as possible to the vanishing point. As we saw before, starting from the actual universe as the first term, we have a series of universes as V and T are progressively reduced, and the

[1] *Bṛhadāraṇyaka Up.*, IV. iii. 32.

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limiting position[1] is reached in the Perfect Experience-Whole or Absolute Fact. Now, our point is that all these series of universes have a community of essential structure and this essential structure is as we find it to be in the first term of the series—the actual universe of a Centre at any moment.

And what do we find that essential structure to be in our actual universe of experience at any moment? However details of structure may vary, the invariable part of the structure is Being, Consciousness and Joy-Play (or Play out of an undetermined Impetus). No experience is there, and no experience is conceivable, which is not this: it is *being*; it is *experience*; it is doing *karma* in the sense of acting in a manner that cannot be *wholly* defined, measured and calculated. "Form" and "Name," as the Vedānta says, may vary, but things of experience do not vary as regards three fundamental characters: that they *are*; that they are *experience*; that they are "*pleasant*".[2]

As I have undertaken an examination of these three (that is, three aspects of one) "invariables" of experience in another work[3] (written in collaboration with Sir John Woodroffe) now in the press, I do not propose to traverse the same ground again here. I would refer to two chapters especially of that work "Consciousness and Reality," and "*Cit* and *Acit*" (Consciousness and Unconsciousness).

The last of the three variables is the most important and presents the greatest difficulties in the way of our understanding the essential nature of a Centre. We have defined a Centre as a certain "phase" of the infinite curve of the Continuum-Point. The idea of Continuum as also that of Point are both in the conception of Centre: the conception presents the Continuum "pole" and the Point "pole", if we

[1] Niratiśayatā.

[2] Asti, Bhāti, Priyam.

[3] *Power As Consciousness*, since published (1954).

may so express it. Philosophies, including the different types of Vedāntic Thought in India, have laid their stress differently on the two "poles". Some have leaned to the side of the Continuum, others have leaned to that of the Point: according to the former, a "Centre" is *really* the unbounded seamless Whole,[1] its limitations being pragmatic and apparent only; according to the other "emphasis", the Centre is *truly* of the nature of the Point [2], its extensity, sphere or field being variable, pragmatic and inessential. The former emphasis gives us the "impersonal" Absolute (of Bradley, for instance in the West) as the *substance* of all being, including that of the Centres; the latter emphasis gives us what we may call "a commonwealth of personalities," in which the supreme as well as the "subordinate" Centres have each its individuality ensured.

In the Vedānta the Māyā-vāda of Śankara on one side, and the "modified" monisms of Rāmānuja, Nimbārka, Madhva, and others on the other side, illustrate, in a broad way, this contrast in the emphasis laid on the Continuum-Point nature of a Centre. It is clear that either view lays emphasis on an aspect or pole only of the actual nature of a Centre.

Let us come back to the Fact. It is a *finding* (that is no theory, supposition or guess) of the Fact that Experience at any moment is a universe "growing" in a solution of possibilities (as I have developed this idea of "growth" in my work, *Approaches to Truth*, and also, briefly, in the work above referred to): every such universe involving, in analysis the three "poles" of Base, Index and Co-efficient, and thus forming a "Polar triangle". Of these three, the first two represent two aspects or elements of the *actual* experience; the third represents its "possibilities". Suppose

[1] Vibhu.

[2] Anu.

a, β, γ represent respectively the poles of Co-efficient, Base and Index of a given universe of experience. If we put $a=0$, the universe itself becomes nothing or a universe that is wholly *actual*, having *no* possibilities. This will mean either of two things: (1) an Experience which cannot be regarded as a "universe" at all—and this is the Pure Æther of Being-Consciousness absolutely without forms and determinations. We call this *no* universe, because the basic idea of universe is some posture of the Continuum-Point before explained. By denying all possibilities of change and growth to an Experience, we may reduce it to this kind of Pure Æther: and Māyāvāda Vedānta has laid its stress exclusively on this Experience as the Pure Æther.[1]

But (2) it may be a statical, unmoving *all*-actual universe also. Since according to our hypothesis, it is an unmoving universe, the co-efficient of possibilities (of change and growth) is zero in it. Such a being can be claimed for the "eternal" world of Platonic "Ideas" or the Realm of Universals (Logical and Mathematical Principles for instance) to the acceptance of which Bertrand Russell and others have decidedly leaned. The Sāmkhyan Root Principle[2] does not satisfy this definition; since according to the Sāmkhyan doctrine it is ever changing, whether in creation or in dissolution.[3] Nevertheless it involves a permanent scheme of being and working: it is ever constituted, for example, of the three *guṇas* P M V; and howsoever variously P M V may mix, that is, condition one another—they together form an indivisible *unit* of being and working. This "scheme" we may call the "Law" of the "Root", and this is invariable and permanent.

Denial of the co-efficient of possibilities (a) means the denial of change or movement. Defining the terms *Kṣara*

[1] Cidākāśa.

[2] Prakṛti.

[3] Visadṛṣa Pariṇāma and Sadṛṣa Pariṇāma.

and *Akṣara* in the Vedānta as "changing" and "unchanging" respectively, we perceive that these are determined by the values we give to the co-efficient, a. If we put $a=0$, we get the "unchanging" element in the universe of experience. This unchanging element may be the Pure Æther above referred to; it may be the general Stress or Power to-be-and-become in Experience; it may be the "Universals" or "Laws" according to which Experience *is* and *becomes*; and so on. It is worthy of note that Vedāntism is not absolutely committed to the view that the unchanging is = the Pure Æther alone. One type of Vedāntism only is so committed. Some types regard the Pure Æther[1] as an hypostatized abstraction, as the western thought, generally, would also regard it. Forms and Relations are not, therefore, necessarily "ephemeral" from the Vedāntist's point of view. According to one point of view, Forms and Relations may belong either to the realm of nature or may transcend them. Those of nature[2] are of course ever changing; but the ultra-natural Forms and Relations unchangingly abide. Are these not suggestive of the Platonic "Heaven" of Universals again?

These are some of the philosophical consequences of putting $a=0$ in our given universe of experience. But instead of putting it $=0$ at once, we may gradually make it evanescent. In that case we get a series of values for a, and, consequently, series of universes lying between our normal, pragmatic universe (in which $a=1$, as we may take it) and the absolutely unchanging, unmoving Experience which the Pure Æther *prima facie* is. This gives us a series of change-values. In our normal experience we discriminate between things and relations that are more lasting than others; Science gives us the atoms and their laws as a still more lasting framework; the Æther of Physical Science may be a yet more lasting framework;

[1] Nirviśeṣa Cinmātra.

[2] Prākṛta, Kṛttima.

and so on. In this way a quest may be undertaken as to the ultimately fixed framework, as Science and Philosophy in every age and country have done. In the Vedāntic literature, we may especially refer to two instances of a quest after the Ultimate Ground in the *Chāndogya Upaniṣad*,[1] and after the Unchanging Ground in the *Bṛhadāraṇyaka Upaniṣad*.[2]

As I have attempted to show elsewhere—no plane or "ground" of Experience (including the Pure Æther or Being-Consciousness), can be logically understood to be unchanging only or changing only; because, to logical thinking change and no-change are two correlatives, conception of the one not being possible without that of the other. Hence, it has been rightly perceived that the truest and the most fundamental conception of *Brahman* is that of the Alogical—the undefinable and unmeasurable; it is one in relation to which such categories as "one and many" "no change and change," "cause and effect", etc., do not comprehensively apply. Every category—even that of unity or of no-change or of infinity—*defines* and, in a way, *measures* the indefinable and immeasurable Being.

And this, as we have more than once pointed out, need not mean that categories are *excluded* from the *Brahman*; for, to say so is also to define and "cut up" the All-Whole. Even a relation of denial or exclusion is a kind of partition; what is excluded is set up there as something *else*. Therefore, the All-Whole ceases to be the All-Whole by being "denuded" of Forms and Categories. To say that these latter do not exist in the sense as something else (*e. g.*, the Pure Æther) exists, and that, therefore, their taking away does not take away from the latter kind of existence, is really no successful attempt to preserve the All-Whole entire. The All-Whole must be inclusive of every kind of existence; else, it is not

[1] I. 8th and 9th Parts.

[2] III. 6th and Brāhmaṇas.

the All-Whole. And in fact, the distinctions—very pertinent ones from the pragmatic standpoint—that we make between this kind of existence and that, do not affect Experience-Being as such or the All-Whole. "Is-ness" is a common denominator of what we judge to be "is" and what we judge to be "is not". The Māyāvāda exclusion of Forms and Categories gives us an Æther of Being-Consciousness that is "pure" and "unchanging," but the All-Whole—the Fact—has been sacrificed by exclusion.

Alogicality of *Brahman* means that It *exceeds* all defining and measuring forms and categories, but that It does *not exclude* them.

Yet some defining forms are intuitively seen to *approach* alogicality more closely than some others. Unity, Continuity, Infinity are categories that are intuitively felt to be more *at home* with the Whole than the opposite. But this is a large question into which we do not at present propose to enter. Assuming now that the more universal and "extensive" ideas are nearer alogicality than less universal and extended concepts, we may try to give an *approximate* description of the *Brahman* in terms of what we conceive to be the most universal and extended concepts, such as Being, Continuity, Infinity, and so on. It is obviously a truer and fuller rendering of the Whole to say that It *is* than to say that It is a gravitating mass. This again is a comparatively fuller account than this that the Whole is red or green; that It is water or air or the sky. The Whole is commonly always veiled for practical purposes; and the veil is drawn over it now closer, now wider. A set of concepts arise—and in fact have arisen—in philosophy which seek to express the Whole so far as they have been able to take it in: it is not only in early Greek Philosophy but in more "mature" forms of thought, that the Whole has been presented in garbs that clothe this or that "limb" only of the Whole: water, air, fire, sky, Æther, matter, life, spirit,

time, cause, nature, force, idea, will, and so forth are some of the garments flung upon the "limbs" of Immensity and Immeasurability; but since the Immense and Unmeasured has absolutely refused to give sittings to the cutter and measurer, It has gone about actually unclad for ever.

But still some garments are only "rags" whilst others are, relatively speaking, "mantles". As a rule the more "extensive" or universal a concept, and the more emptied of specific content restricting the scope of a concept, the nearer does that concept come to the native alogicality of the Whole. The pendulum of logic oscillates between two limits: and both the limits of its amplitude are alogicality—one is the indefinable and immeasurable Whole (the Continuum as we have called it); the other is ultimate—indivisible and unanalysable particular (ideally = the Point). Between the Continuum and the Point, understanding as a defining and measuring stress, operates. And the nearer understanding approaches these two limits of its amplitude, the more ununderstandable does its theme become. It is not correct to think, therefore, that inasmuch as the Whole exceeds all concepts that define, all concepts are *equally* irrelevant and inappropriate with respect to the Whole.

We were dealing with the "no-change" concept which we got by putting *a* (co-efficient of possibilities) = 0. We saw that this concept, too, presents a series of values. According to some types of Vedāntic teaching, the highest value is represented by the Pure Æther = Pure Being-Consciousness in which the universe of experience (aggregate of forms and determinations) "lives, moves and has its being". It is the *Akṣara par excellence*. Forms and determinations may be there or not there; they may change. Even as regards the Types and Universals (the logical Principles to wit), it may be a conceivable hypothesis that for minds constituted radically otherwise (those for example, for which the famous Kantian

Synthetic Judgment *a priori*, 5+7=12, need not be true), the world may not be dominated by those Universals; but it is absolutely inconceivable that the universe of experience is other than *Being*, and in, and of, Consciousness.

Consciousness as the Pure Æther in which "modes" appear and disappear, one that gives to these modes their substratum of *being* and imparts to them their fundamental character of being *experience*, and further, makes each a manifestation of an essentially *undetermined impetus*, has not been widely recognised in the West (and in India, also, by many types of psychological thought), because consciousness has been uncritically and under the influence of an unconscious pragmatic illusion, identified with this or that mode, this or that determination; so that, it is just the series or sum or stream of these particular "pulses" that is commonly supposed to constitute consciousness.

The claims of Pure Consciousness as the Perfect Æther distinguished from the particular states, modes or determinations, and yet supplying them their foundation of being, manifestation and activity ("Play"), we have discussed at length in another place. We do not think that Pure Consciousness is an hypostatised abstraction. And though some types of Vedāntic interpretation (*e.g.*, that of Rāmānuja) have argued against the Pure, undifferenced "Æther"[1] it is scarcely open to doubt that the Upaniṣads do stand surety for it in many documents (Texts) of unimpeachable "bona fides". We have further maintained elsewhere that the Pure Æther is proved by the "Method of Conceptual Limit" and the "Method of Perceptual or Intuitional Limit".[2]

[1] *Cf. Śrī Bhāṣya*, under I. i. 1, § 49, 50, etc. § 79, 80, etc.

[2] See last Section of *Approaches to Truth*; the position is more simply stated in a later work—*Patent Wonder*, which, it is hoped, will soon be republished.

The former is, briefly, the method of *thinking away* all determinations from experience with a view to reaching the inalienable and ineffaceable "Primary ground". The latter is the method of *actually* eliminating all determinations with a view to seeing whether the Primary ground of Pure Æther does or does not vanish in the process. This latter method may be either *normal* or *abnormal*. The normal is illustrated, as closely to perfection as may be commonly possible, in (*a*) deep, dreamless slumber (granting that it is not a case of dreams forgotten); in (*b*) the experience of just going to fall asleep, and that of just going to wake up (cases studied at some length in our *Approaches to Truth*); and in (*c*) all moods of "reflective", "onlooking" detachment in which he "Self" intuits itself as a pure Illumination revealing the whole "scene" of experience.

The abnormal or ultra-normal cases may be either sub-normal or hyper-normal. To the former category belong the more or less closely approximating pathological cases of "swoon", "vacant mind", generalized, extended, vague, chaotic consciousness, and so forth. To the hyper-normal order belongs trance and *Yoga*, culminating in "pure non-polar beatific vision."[1]

Besides these two we have purely theoretic considerations also showing that the "state" or "mode", the particular form or process, the series, the stream are not the *whole concrete*, *original* datum of experience, but that they are all obtained by the veiling of, and abstraction from the whole, concrete, original datum, which is directly intuited as an undefined universe *in*, and *of*, a Pure Æther of Consciousness.

To direct *apprehension* experience is always that of a continuum, though for pragmatic reasons, its *appreciation* may be more or less restricted. The particular state or mode can displace the continuum not in actual apprehension, but only

[1] Nirvikalpa Samādhi.

in pragmatic appreciation. Even when experience seems to be concentrated as nearly as possible into a Point, its actual *intuitive* spaciousness as such is not reduced, but its area of intuitive manifoldness, and still more, that of logical appreciation is reduced. When Arjuna saw nothing else than the eye of a bird, placed at the top of a tree, which he was required to shoot at, he had an experience of a much more condensed and concentrated kind than those of his brother archers who had preceded him. In his case, both the intuitive and the appreciative areas were apparently reduced to the eye of the bird he was required to hit. Still his actual experience ceased not to be a continuum at that moment: it was a continuum of consciousness in which a small feature only, namely the bird's eye, formed the "focus" of regard, with the "fringe" reduced as near as possible to the condition of bare consciousness. It is as if the infinitely varied panorama of the starry heavens at night were reduced to the perception of a single star, or that of a vast expanse of wilderness to the perception of a solitary rock or boulder. The solitary star or rock is perceived as of a wider background of being. In intuitive apprehension and in pragmatic appreciation, the solitary star or rock may "use up" so much of effective attention or consciousness, that the wider background of the sky or of the field may be almost entirely veiled and obscured. Yet the actual experience is surely not that of a star in the sky or that of a rock in a field; there is, undoubtedly a more or less dimly felt intuition of a wider "setting" of being. And though there may be some doubt as to a particular form of being-background (*e.g.*, the sky or the field) being intuited in the cases where a star or a rock or any other particular thing or feature is being "taken in" in a spell of concentrated rapt attention, there is absolutely no doubt as to the continuum of *being* as such being intuited in such cases, and also, as to the continuum of *consciousness* as such being intuited.

In other words, the background of Being-consciousness as such remains as the inalienable and ineffaceable background of all experiences, whatever area the manifold of apprehension or appreciation may possess. The means that actual experience—whether that of a rich and varied panorama or that of a solitary star or rock—is always the experience, may be practically unappreciated, of a background of Being-Consciousness. Even that of a Point is so. This makes the Point in actuality a Continuum-Point. The manifold of "Name and form", may, in practice, assume any intermediate position between the Infinite Universe or Cosmos [1] and the Point; in other words, it may be any universe of a "Centre." The two limiting or ideal positions may also be reached. But in all these positions—ideal, approximate or intermediate—Experience always involves the Being-Consciousness background or that which we have called the "Primary Ground." [2] The Primary Ground is the fundamental framework, and the fundamental framework is also the one that is least open to non-manifestation: every particular experience is unquestionably Being-Consciousness with a particular determination, on which attention may lavish itself but without succeeding to conceal altogether the background of Being-Consciousness. The "Secondary Grounds" or frameworks, before referred to, *viz.*, the Root Measuring and Limiting Principle with its apparatus of "Universals," the "Causal skeleton," the Perceptual context or setting in which particular perceptions (sensuous or "mental") are had—all these may be, and often are, more or less successfully veiled in the events of ordinary experience; but the Primary Ground itself absolutely refuses to "retire".

[1] Viśvarūpa.

[2] What *Chāndogya Up.*, before cited, calls "Ākāśa"=Jyāyān, Parāyanam (I. 9th Part).

The Vedānta, accordingly, calls it the Ground of self-evidence and self-manifestation.[1]

Measures and Limits (grades, degree, etc.) do not affect the Primary Basis as such. And it ought to follow at once from the premises we have laid down that *sub*-consciousness, *un*-consciousness, *super*-consciousness, are orders, measured out *within* Being-Consciousness itself. And it will be seen that the Primary Basis possesses a further fundamental character—Joy-play.

[1] Svatahsiddha, Svaprakāśa.

X

CIT AND CONSCIOUSNESS

Cit, as Consciousness, we have exhibited as a concept which is broad enough to embrace Being-Experience-Whole. It is larger than "focal" consciousness; it is larger than even focal consciousness *plus* the "fringe", or the outlying zones of semi-consciousness. It is not merely the subjective half of the universe of experience: the world of things or objects is also consciousness. And in making this latter assertion, we do not assert that things or objects are only "ideas": they are existents independent of ideas. The polarity of subjective and objective, thought and thing, is a polarity that does not contra-distinguish consciousness from what is not consciousness, but it is one that distinguishes one mode or attitude of consciousness from another. It comes to this, therefore, that a thing, *e.g.* a rock, is a mode of consciousness without being subjective, mental—that is, an idea. Possibly the western term "consciousness" is too strongly and decidedly suggestive of subjectivity, mentativeness or ideality to do office for *Cit* which is identical and co-extensive with Being. A man in the west will assuredly be dubbed as a Berkeleyan idealist, if not a solipsist, who calls a yonder rock a mode of consciousness. But a Vedāntist may call it a mode of *Cit*, and yet he does not thereby cease to be a realist—even a naive realist, believing both the primary and the secondary

qualities to be in the rock itself, and not in the perceiving mind.

Cit is identical with Being or *Sat*. The group of "Centres" that we recognise as minds and those that we recognise as matter, are both in, and of, *Cit*. We have seen how Centres represent positions in the involution-evolution curve (freely determining itself) of the Continuum-Point; and how the Continuum-Point represents a polarized condition of the Perfect or Absolute Continuum—a condition necessary for immanent movement which is *Jagat* or the World. Now, *Cit* is nothing short of this Perfect or Absolute Continuum.

This Absolute Continuum, which is also the concept of *Brahman* in the Upaniṣads, presents (1) The Pure, unbounded Æther of Consciousness of which we spoke before. We saw also that, intuitively, it is the aspect in which the component of Movement and Change is either zero or infinity. In the former case, there is *no* change in it; in the latter case, there is a change in it of such dimensions that it is beyond the computation of finite frames of reference. A straight-line, for instance, is a circle with an infinite radius; but to all finite frames of reference it is a straight line and never a circle. All finite Centres have their limits or intervals of cognition and recognition; the eye or the ear, for example, can respond to light vibrations or air vibrations only within certain specified limits; so that, vibrations, either too slow or too rapid, fail to be cognised.

So it may conceivably be the case that the Pure Æther may be a *moving* Æther whose movements transcend all finite or at any rate, human capacities of apprehension. To such Centres it appears to be placid though, in reality, it may be moving. Such intrinsic, though by us unperceived, moving may be either invariant or variant. Suppose x, y, z be the three components of movement. Then, it is invariant, if

either (*a*) $x=0$, $y=0$, and $z=0$, or (*b*) $x+y+z=0$ (without each component being severally zero). It will be variant if $x+y+z=$ something. But this something to be capable of being apprehended by a given Centre, must be of certain assigned dimensions (as in the cases of light-vibrations and air-vibrations). Hence, not only invariant but variant movement also may be unperceived.

Such a possibility of movement and change may, therefore, pertain to the Pure Æther as apprehended by *us*. Nevertheless the fact remains that we *do* intuit it as a placid and quiesent Æther in which our universes of experience exist and change. And further—since it is intuited as the *pure* "light" of manifestation and also as the *pure* basis of being, we cannot conceive any other kind of movement in relation to it than what we may call *pure* movement—that is, continuance or persistence in its own given state of purity.

Pure movement or action may also be taken in another sense to mean absolutely free or spontaneous action—action independent of any extraneous factor. God is *Actus Purus* in this sense. Now, since the Pure Æther is intuited as the *whole* substratum of Being-Consciousness, we intuit it also as acting *purely* in the sense here explained. In other words, since there is no other Being in relation to it, it moves or acts freely; and such pure action is a double-faced action—(*a*) action that makes it persist or continue as such; and (*b*) action that makes it manifest as a Universe or World (in a comprehensive sense including the Continuum-Point and the Centres of all grades). But these activities are *pure* and they do not annul each other. The Pure Æther in manifesting as the World does not cease to be the Pure Æther.

Under (*b*), or world-evolving action, we have again to distinguish between two forms: (i) invariant action, and (ii) variant action. By the former the Stress in the Pure Æther becomes the Continuum-Point which, as we have seen, is the

necessary condition of there being a universe of Centres at all; this Continuum-Point evolves as a correlated system of Centres, and the free involution and evolution which this movement involves, may be called *variant* action. The Continuum-Point Itself represents the *invariant* phase of the Absolute Action. It must ever be, if the universe of Centres must be.

The Continuum-Point, no doubt, freely determines Itself as the Cosmos; but in order that It may be a *Cosmos* at all, It must involve some determination by Law or *Ṛtam*. So that the Cosmos exists and works in accordance with a system of Principles or Determinants, without, however, forfeiting in every Centre its intrinsic right of free and spontaneous action (Joy-Play). This cosmic determination is also a phase of invariant action.

(II) The second component aspect of the Absolute Continuum is the Continuum-Point—an idea that we have already enlarged upon. It is the Continuum itself regarded from the standpoint of involution-evolution, and the consequent existence and interplay of a multiplicity of Centres. In other words, if we must conceive a World freely involving Being-efficiency[1] and freely evolving that again—and this is what the history of the World means—we must conceive an infinite field of Being-Power which, without ceasing to be such, becomes also an infinitely condensed "Point" of Being-Power. The "field" must be there in order that the "scene" may be laid in Space, in Time, or in other "co-ordinates" of the Continuum of Being. The "Point" must be there in order that it may multiply itself into a plurality of "actors" in the cosmic scene, each with an unfathomed capacity or possibility of free action and evolution. Not only the Self and the living cell, but even the atom of matter is now recognised to be such "actor"; each acts, no doubt, in accordance with a concerted plan, (and this is the element of *Ṛtam* in cosmic history), but each is, essentially,

[1] *Sattā-Śakti*.

a free Centre that not only redirects the available cosmic energy, but is a "tap" through which exhaustless energy is flowing on into the available stock—thus making conservation of energy merely a rough generalisation of Nature's economy. Now, no Centre could possibly be such an actor of unlimited dynamic capital, if it were not for the "Point" (=absolutely condensed Being-Power) at its core.

Every Centre consumes outside Being-Power, and this is its "food,"[1] and it grows. It also offers itself as "food" to other Centres; in so doing, it gives out or dissipates its Being-Power. A working balance is of course practically maintained in nature's economy. But, nevertheless, it is a misconception of the essential being of a Centre to suppose that it consists in merely maintaining an equation between its give and take—that the life of a given Centre is nothing else than a transposition of elements of substance and energy between itself and other Centres. It is in itself a magazine of power of incalculable magnitude: an atom of matter is so; a living cell, single or aggregate, is so; an Ego or Self is so. The practical give and take of any Centre is an infinitely complex affair; of this only a small fraction is recognised and appreciated by a given Centre itself or by other Centres that may take cognizance. It is superficial thinking (though practically useful), therefore, to express the actual wealth of being of a Centre in terms of this little bit of its "current account". In the Bank of Reality the wealth of a grain of sand or a drop of dew is represented by enormous "fixed deposits" of which the common "Stock-Exchange" of our convention has no inkling.

Now, these enormous "fixed deposits" and the fundamentally free "use" to which a Centre puts it or can put it, would not be possible if it were not, in reality, the Point. The Point lying at the core of every Centre makes it a

[1] "Annam"; "Somam".

"cave"[1] or "little abode" of *Brahman*: its apparent littleness is merely a cover for the underlying profundity and immensity of Being-Power.

The Continuum-Point is thus (1) at the core of every "finite" Centre as its infinite deposit of substance-energy of which its "effective" or pragmatic being-effciency value represents but a fractional current account in the bank of convention; (2) It supplies, in Its Continuum aspect, the necessary medium for inter-central transaction; (3) the Centres are varying positions in Its involution-evolution circuit; and (4) as Continuum-Point It embraces and controls them all; but (5) since each Centre is really a position of the Continuum-Point Itself, it is essentially what the latter is—a Centre of Being-Consciousness-Joy-Play: it is free. If we introduce the distinction between the phenomenal self and the transcendental self of a Centre (the "self-principle" is in every Centre—even in a hydrogen atom), we may observe that, as the former, it is partly self-determined and party other-determined, but as the latter, it is *wholly* self-determined or autonomous.

Now, the characters we have exhibited above of the Continuum-Point make it clear that it is the concept of *Brahman* as the "Lord" or God. The Absolute-Continuum or Whole of which the Continuum-Point is a component aspect is alogical; but this component aspect represents, like Plato's Idea of Good in his hierarchy of Ideas, the supreme Concept-entity in the logical line: It is Being-Consciousness-Joy as acting, as "positing itself" (in Fichtian phraseology).

This acting or self-positing logically presupposes a self to be posited; and that self is the Absolute Ego or "I"[2]—which is the "mental" version of what we have exhibited as the

[1] "Guhā"; "Dahara veshman"—repeatedly met with in the Ups. See, in particular, *Kaṭha* and *Chāndogya*.

[2] Parāhantā; Aham-Vimarśa.

Point. Since according to our exhibition of the Fact, Experience-Whole = Continuum = Being-Consciousness-Joy, the point is a Point of this last, that is, it is this last positing itself as the Supreme "I".

The place of the emphasis on the two logical poles of "I" and "Other" will make this supreme logical concept-entity appear in different roles,[1] but the fundamental concept of the Continuum-Point is easily recognisable in all these varying forms. The concept, again, is an entity, since its reality is not delegated to it by the conceiving of any Centre, but is fundamentally implied in the existence and activity of a world of Centres itself.

It posits Itself and other. Itself is = Point; the relation of Itself and Other is = a line. It posits Itself as many = an infinity of lines radiating from a Point.[2] The finite Centres, as we have defined them, each represents a sphere in one of these lines radiating from the point. These infinite lines of radiation are the streams of the Point's stressing to be the Continuum. It *is* the Continuum, but its inverse form, as we have previously explained. By radiating in infinite lines of manifestation, the inverse Continuum stresses to be the direct Continuum again. It is like an infinite coil of wire pressed into a point under an infinite pressure, and in that position representing infinite intensity of force, tending to expand itself into the parent condition again. This, however, is a mechanical analogy roughly illustrating the behaviour of the Point. Since the Point has become, and is, every Centre, the latter, in every form, is a radiating Centre: an atom of matter is so (radiation being prominent in the radio-active bodies is basically a universal natural manifestation); the cell of protoplasm is so; and the mind-stuff with its

[1] *Cf.* the Evolution of the 36 Tattvas in Śaiva-Śākta Āgama in *The World As Power* and other books on Tantra Philosophy.

[2] "So'kāmayata. . ." *Taittirīya Up.*, II. 6.

Ego-centre is so. Each is so because the Point which is at the core of its being is a radiating nucleus of infinite range and potency.

As in the planetary systems (atomic or macrocosmic) we have concentric rings of orbits, so (but the analogy must not be literally taken) we have different "planes" for Centres and groups of Centres to move on. These planes are the "stages" or positions, previously discussed, in the involution-evolution circuit.

The matter is like this: The Continuum remains a Continuum in being the Point. That is to say, the Continuum has at the same time (we are, necessarily, speaking temporarily; but the relation is not a purely temporal one) the direct and the inverse forms—*plus* infinity and the *minus* infinity poles. Then, the Point, which is infinitely condensed potency, gives out "sparks"[1] of "others" in infinite lines. This represents the tendency of the inverse or *minus* sign to "unite" with the direct or *plus* sign: a tendency represented and illustrated in matter, life and mind. An atom of matter is, for instance, constituted by electric charges of different signs keeping apart;[2] their coalescence would mean the annihilation of that atom of matter as a specific centre of being-efficiency. Difference in sign is represented in the living world by the difference in "sex"; and sex, understood in the sense of mutually attracting or repelling (as the case may be) "life-atoms"[3] must be conceived as fundamental, pertaining to the unicellular beings (protozoa and protophyta), or even to their vital components. The Ego and the Other represent the fundamental difference in sign in the mental world; the two, often, in the comparatively "lower" forms, taking the unsuspected forms of mere "agent and patent" "stimulus

[1] Visphulinga. *Cf. Muṇḍaka Up.*, II. i, 1.

[2] Idea of Antarikṣa.

[3] Prāṇa-Aṇu discussed especially in the *Brahma-Sūtram*.

and reaction" in what psychology recognises as the "reflex-arc".

Now, the Point never ceases to be itself in giving out an infinity of "sparks" in an infinity of directions. The Continuum and the Point are undirected (or as the mathematician will say, "scalar") Forms. Directions (that is "vectors") appear in the process of the Continuum-Point stressing to give out an infinity of "sparks". This process is the process or history (temporarily understood) of the World. The "spark" means that, practically, that is with respect to its own appreciation and that of similar "sparks," it is a part, a finite segment of the Whole which the Continuum-Point is. In reality, it is the Point itself. The "spark" is a Centre as we have conceived it.

Each Centre exists and moves in a certain plane of the Point's "creative evolution". The planes are infinite in number, and yet, with reference to a standard decided upon, they can be arranged in an ascending or descending series, or hierarchy of "positions"[1]—with respect to which, again, the advance or retreat, progress or degradation of a given Centre can be determined. However that be, it is to be noted that every Centre—which is a "swelled" Point or Point with a pragmatically and conventionally determined "sphere" of being-efficiency—has *two* components of its motion determining the character of its cosmic orbit.

Those two components are what we have previously explained as the "Positional Determinant"[2] and the "Intrinsic Determinant"[3] of a Centre. It is the ratio of k/a (the first letters of the corresponding Sanskrit terms) which determines the character of the curve of a Centre's cosmic path. It is a variable ratio; so that the curve of any Centre's path can be expressed as a *function* of $k : a$. In the Continuum-Point, a is infinitely reduced; since, It has no "other" in relation to

[1] Loka. [2] Adṛṣṭa. [3] Karma.

which It can be given a position. It is Its own position—absolute self-position. The co-efficient of *Karma* is infinitely great here. That is to say, the Lord is an absolutely undetermined and immense Being of "Joy-Play".

In the finite Centres, both k and a have finite values; and both the co-efficients vary. a of a given Centre, C, varies on account of the k of other Centres C′, C″, . . .; and it varies on account of the k of C itself. And though the so-called matter particles appear, conventionally, to be on the plane of inertia and external determination, the co-efficient of k is really in them, actually determining their behaviour and cosmic path. Their a-index seems to be great and their k- index seems to be small only with reference to a certain frame of convention; from which we are not to argue that these indices are in reality as they seem to be in reference to a particular frame of convention.

An atom of matter may be, in reference to the ordinary chemical frame of convention, treated as a "unit" without a domestic economy of intra-atomic substance and energy; it may be treated as though it were subject only to external propellors. But if we exchange this frame of convention for another—*e.g.* that in which atomic constitution and the phenomena of radio-activity become relevant,—then, we find that not only is the atom not without an internal stuff and energy, but that the internal energy is incalculably great and the motions of the internal substances (electrons) prodigiously great—comparable to those of light; and further that the domestic government of the atom in so far as it is reflected in the phenomena of radio-activity is a kind of autonomous government (Sir E. Rutherford and other authorities conceiving radio-activity as a spontaneous phenomenon, very slightly, if at all, affected by external agencies such as great heat and cold, chemical action, and so forth). We have already previously referred to the Quantum phenomena, "jumping" of

the electron in its orbit, and so forth, which indicate not only that the atom has to some extent an autonomous domestic economy, but also that its "freedom" is of the nature of "Joy-Play".

It is insecure no doubt to build upon what may, after all, be the actual or possible insufficiencies and limitations of deterministic physics. If we imagine away these insufficiencies of the scientific method, may we not imagine a twentieth century Haeckel or Huxley still claiming that the universe is an absolute Realm of Law, giving no quarters to either freaks or fancies, either chance or joy-play; and that, therefore, if the physicist possessed to-day *all* the data he would be able to foresee any future world-event, material or other, even as the astronomer is able, on the strength of his observed data, to calculate precisely the occurrence of an eclipse of the sun or the moon?

That determinism and indeterminism (that is, freedom) play, so to say, "hide and seek" in our appreciation of the world occurrences, is a fact that stands firm and clear. Freedom chased out from one retreat, takes refuge in another; but it has been never laid for good. It has fared as "miracle" has fared. As miracle driven out from "special" realms, has now entrenched itself everywhere—as every occurrence in Nature has now become, in a realistic sense, a miracle,—so has Freedom and Joy-Play. The occurrence of a drop of dew *is* a miracle the moment we transcend the limits of a certain convention defined by a set of concepts and formulæ,—that is the moment we refuse to be shut up within a certain "arbitrary limitation of the data" which the application of scientific method means and requires.

The living cell and the Self have, generally, been recognised as the exploders and directors of energy, if not as creators or importers of energy. It is in any case a free functioner. The minutest species of micro-organism is already

a centre of very specific and complicated action: how it will act exactly at any moment is unforseeable and incalculable. It absorbs its "food" of being-power no doubt; and it stocks it as its fund of dynamic action. But the energy "let-loose" in its action seems not to be commensurable with the energy absorbed as food. The cell-apparatus may be a "commutator" for changing mechanical force into biotic force; but "mechanical force" in thus being transformed is not simply "taken over"; it appears to be reborn into larger and subtler dimensions. This means that in passing from the mechanical to the biotic form, operative energy becomes "re-inforced" by becoming more directly and intimately connected with the unfathomed mine of energy which the Point at the core of every Centre is. What is called mechanical force is not something different from biotic or mentative force: Being-Power is one. But in the biotic plane a Centre is more directly and intimately connected with the Point at the core of its being than in the mechanical plane. Different Centres or different "envelopes" or "sheaths" of a given Centre may be more or less directly and intimately connected with the "core": a more direct and intimate connexion meaning a greater availability of the "fund" at the core for the practical purposes of the Centre or its envelopes.

Such availability of the fund of dynamism for the different members or parts of a mechanical system of bodies (*e.g.* a group of galvanic cells) is also an important consideration. In the ordinary elements intra-atomic energy, vast and exhaustless as it seems to be, is hardly available; but it becomes available in what are called radio-active substances such as radium, thorium, etc. Now, our point is that energy being "raised" to the biotic plane makes the dynamic core at the Point available to a degree that was not manifest so long as it was confined to the mechanical plane. It is on account of this that a living Centre exhibits itself as

commanding an energy of higher and larger dimensions (not commensurable with the energy absorbed as "food") than a material Centre, say, a crystal of salt.

The Ego-Centre seems to be a Centre of even greater competency in this sense than a Centre in which the Ego, as such, is yet undeveloped. And from the principles we have before enunciated, *all* Centres are essentially the Continuum-Point, their difference being only difference of position in the involution-evolution curve; so that the Ego-principle is, in substance, given in every Centre. Nevertheless their varying positions do make certain practical and conventional differences and one of the most important points of difference *is the degree and manner in which they can "close their circuit" with the point at the core of their being and thereby render the infinite dynamism there condensed available for their purposes.*

With reference to this standard, Centres fall under two broad categories which we may call "in-door" and "out-door". The former represents a class that turn their "face" to the core and are, accordingly, most "alive" and intrinsically dynamic. The latter represents a class that appear (at any rate with reference to *our* frame of convention) to turn their "face" away from the core, and are, accordingly, "inert" and externally determined. Needless to say, Centres form a series between the two limits of utmost "life and self-activity" and "inertia and determination". A block of stone *appears* to belong to the latter category.

In this way, a Centre that has developed a Self with envelopes of biotic and mentative stuff-efficiency, is one that is, constitutionally, the best efficient apparatus for making the infinite "Coiled Power"[1] at the core available to the utmost extent. It is an "in-door" Centre of a high order. *Prima*

[1] Kuṇḍalinī Śakti, for an exposition of which see Sir John Woodroffe's *Serpent Power*, especially the Section—The Theoretical Bases of Kuṇḍalinī Yoga, in which my views have also been stated at some length.

facie, it is so. Behaviouristic psychology cannot be satisfactorily written in terms of "in-take" and "out-put" of energy alone in the nervous system. Every stimulus provokes the Self to explode a mine of energy and switch it on so as to describe a reaction-arc, simple and fixed or complicated and variable, as illustrated by William James in his "child and the candle" example which has since become classical. But whether the arc be simple or complicated, fixed or variable, it is evident that Self is an exploder, chooser and "pointsman" all rolled into one. No adequate account can be given of behaviour in terms merely of "mechanical" afferent and efferent currents: somewhere explosion does take place; somewhere choice between alternative routes is made; and somewhere re-active energy is directed. To say that the nerve-centre or neuron does all this instead of the mind, is no real clearing up of the mystery. Whatever does it, it *is* done.

Mechanistic determinism will score its points if it can show that *no* choice is really made between alternative routes, and *no* directing is needed, or is possible. But can it show this? That a route is chosen is *prima facie* the fact; and the onus lies on the determinist to shew that the fact is a fiction; that the "arc" of reaction simply represents the line of least resistance for the incoming impetus, augmented or checked by the central energy as the case may be, to go out to the muscles. The line or route followed *may* in fact be the line of least resistance under existing conditions; but not the least important of the existing conditions is the part played by the "Centre" itself which manipulates the afferent current and starts the efferent one. A dead frog may be made to twitch its legs under the influence of a galvanic current; a live frog, too, moves its legs in a manner if at a certain position of its body an irritating acid be applied. But there are striking points of difference between the two cases. The former is a fixed, simple, invariable reaction; the latter is a complicated, variable

response; the live frog may, and often does, go through *different* response-complex under the *same* external stimulant; for instance, the irritating acid may make it jump in one case and rub the irritated limb with a leg in another. The actual behaviour of living beings is complex and variable (and therefore not exactly foreseeable) apparently under the same exciting conditions.

Experiments performed with frogs, pigeons, hens, hares, dogs and so forth go to show that these animals, when their brain-substance has been removed, can go through practically the whole round of their actions and reactions, both fixed and variable, with only one marked difference, namely, that these reactions are performed "with increased inertia" or lack of initiative. In other words, the removal of the brain, which is supposed to be the organ and seat of consciousness, does not affect the essential selective and variable character of the responses, though it seems to reduce what we may call the "agility-index" of the nervous apparatus.

The position might be strengthened by evidence from what is now commonly called "Abnormal Psychology". We need not especially go into them now; but the point is that many complicated and variable mental processes are gone through and bodily forms of conduct are performed apparently without the supervising direction of what is pragmatically *our* consciousness (that is, the cerebral consciousness). And if we decide to define such consciousness *as the possibility of varying action under the same assemblage of conditions* (*e.g.* in the same assemblage of conditions A, B, C, either X may be done, or Y or Z), then, it has to be recognised that that possibility is not confined to the cerebral hemispheres, but that it is at least co-extensive with every form of living tissue. Further, if projected or "exteriorized" consciousness (if not "disembodied consciousness" as believed by many neo-spiritualists) really exists, then the possibility above referred to is not merely

co-extensive with, but wider than, what we commonly appreciate as living matter; it may be connected with a subtler vehicle.

And since it is becoming increasingly clear that even units of matter can vary their action (*e.g.* the jumping of the electron in its orbit, and so forth) under a given *ensemble* of conditions, the possibility above referred to, and therefore, consciousness, cannot be withheld from matter also. Physical science, as we have repeatedly observed, must, in the last resort, start with an apparatus which is both undefined and unmeasured; and its explanation of the World consists in an increasing attempt to *appreciate* this fundamental indefinability and immeasurability by an apparatus of definitions and measurements (which are not, however, merely "subjective"). It must follow from this that fundamental alogicality (exceeding all measures and definitions) underlies the apparatus of logical appreciation which science is. We cannot say, therefore, that Being-Power in itself and as a whole is exactly covered by these (or any other) formulæ and equations—that it is *determined* by these rules exhaustively, leaving no margin and substratum of indeterminateness.

The substratum of indeterminateness is the possibility of varying action under set conditions, which no scientific calculus can rob from Being-Power in any form. We need not further pursue this question, but it is evident that if consciousness be conceived as the possibility of varying action or indetermination, then, it is bound up with the essence of everything. And this is what follows from the general premises of the Vedāntic doctrine (those relating to the Fact or Experience-Whole, Continuum-Point, Centre etc.) that we have been discussing. Matter, Life and Mind are classes of Centres; so that, whatever fundamentally pertains to Centres, pertains to them. A Centre is in, and of, Being-Consciousness-Joy-Play. But different classes of Centres, and different Centres

in the same class, are pragmatically unequally situated in respect of the degree and manner in which they are able to "tap" the unfathomed mine of Consciousness-Joy-Power concentrated at their core.

The Being-Power at the core and as distributed in the envelopes is "consciousness" in accordance with the conception we have formed of it—possibility of varying or selective action under a given *ensemble* of conditions. It is the "index" of Consciousness: the term itself being indefinable. "The cross-section of the environment made by the reactions of the nervous apparatus", "the detonation of a nervous impulse meeting an obstacle in its route; a temporary clog or inhibition; and a consequent deflection of the current to a loop or circuitous route";—these and such other "definitions" of consciousness are no definitions of *Cit* in the fundamental sense in which the Vedānta has meant it.

It is also evident that the basic "index" of consciousness (*viz.*: possibility of varying action or *Karma* under set conditions) is also the basic index of Joy. Every such action is, therefore, Play. And not only every such action but all action is Play. Many, no doubt, seem to be determined; but this is true only in so far as the undefinable and unmeasurable fundamental nature of the Centres (*e.g.* material bodies) doing such actions, are subject to the Measuring and Limiting Stress (that is, *Māyā*). "Being subject to *Māyā*" means—arising out of the measuring and limiting action and depending on it. All finite Centres, with their universes of experience pragmatically defined and measured, are thus subject to *Māyā*, and have their actions determined by the terms of this subjection.

Yet just as the *wholeness* of the Being-Power of any Centre exceeds the bounds of its (or of others) pragmatic appreciation, so the *wholeness* and *reality* of its action exceeds the determinateness of its measured character. As the poet is greater than his poetry, and his poetry greater than any

special "construction" that may be put on it, so the Being-Power of a Centre is greater than its action, and the concrete whole of its action is greater than any logical and deterministic account that may be given of it. A deterministic account or explanation of an action is always one that is roughly and approximately true. In its concrete wholeness, it is inexplicable—a "miracle play".

Māyā spreads her net far and wide, and its meshes are fine and subtle enough to catch "the smallest fry"; yet she absolutely fails to catch the Whole Fact itself—both in the Absolute Continuum and in the Absolute Point form. And since any Centre is *really* the Continuum-Point in a certain "position" (as before defined), the net does not catch the real whole of a Centre, or the real whole expression or action of a Centre. *This*, therefore, never ceases to be in the nature of Play, whatever structure of determinateness may appear to be laid on it.

Since the Continuum-Point is the very pre-condition of a Measuring and Defining Stress beginning to operate in the unmeasured and undefined Whole, It is not subject to it; it is the "master" of it.[1] The Point like the Continuum is undefined and unmeasured; and it is a logical necessity for any process of measuring and defining to set in. We may think, therefore, that the Continuum-Point wields and spreads the measuring net spoken of above. Its action is *actus purus*—pure, absolute Play.[2]

We have in a previous lecture tried to form an idea as to what the experience of the Supreme Centre (the Continuum-Point) may be like. We considered it in respect of the two components (V and T) of the Measuring and Defining Stress. It was found that It represents a plane of experience which has (*a*) an unveiled and untreated intuition of the

[1] Īśvara=Māyī. Cf. *Śvetāśvatara Up.*, IV. 10.

[2] Līlā-Kaivalyam.

Whole; (*b*) an unveiled and untreated intuition of Itself as the Continuum-Point evolving into an infinite series and "configuration" of correlated finite Centres, underlying them all and "controlling" (in the sense previously explained) them all; and (*c*) an unveiled and untreated experience of veiled and treated being-experiences of the finite Centres, constituting limited "seers and seens", agents and patents, *distributively*.[1]

This interesting question of the nature of Lord's Experience we have shortly dealt with in another book to which reference was previously made;[2] there is but one point to which I wish to call attention in this connexion. Just as individual veilings and treatings (V's and T's) of finite Centres are known by the Experience of the Continuum-Point without rendering the latter itself veiled and treated (in fact, Lord's Experience would be a veiled and partial experience if it did *not* know the V's and T's in the finite, individual Centres), so Lord's Experience in what is called its feeling or "affective" aspect, is still an experience of infinite, uncompromised Joy-Play, though in it are reflected all finite Centres' individual pleasures and pains. Our smile of joy and tear of sorrow are both reflected on Divine Consciousness. But inasmuch as Divine Experience is not the mere aggregate of the experiences of the finite Centres, it is not the mere aggregate of their pleasures and pains.

Pain or sorrow is a feeling of negation and constraint. It is bound up with measure and limit, particular determination. Its necessary correlate or "pole" is Pleasure. Every measured, limited, particularly determined consciousness has been a pleasure-pole and a pain-pole, and the question as to which pole will be emphasized and prominent in the experience of a given Centre, will depend upon the Centre's "outlook",

[1] Sarvajña and Sarva vit.

[2] *Mahāmāyā*, or *Power As Consciousness*.

"angle of vision" and 'temper' at any moment. The outlook and temper changing, the emphasis may be shifted from the one pole to the other, and an experience felt as painful before, may have its feeling-attitude and feeling-index changed. In every experience of sorrow such possibility of the feeling attitude and index changing is given; and so in every experience of pleasure.

And yet as the unmeasured is ever at the basis of the measured being-experiences, an unmeasured Background of Joy-Play (which is non-polar and therefore neither pleasure nor pain) is implied (that is latent) in all relative experiences of pleasures and pains. In us the Background, without being effaced, lies concealed in feelings—as it does in finite, pragmatic knowings, and in finite pragmatic doings or actions. The Background in knowing is Perfect Consciousness (involving the aspect of Pure Consciousness in the sense of the "Pure Æther" before explained); that in doing or acting is Pure and Perfect Play in the sense before explained; and that in feeling is Pure and Perfect Joy or Bliss.

In the Lord's case this Background is patent, so that the subsumption of individual, finite pleasures and pains do not render the Lord's experience a mere sum of finite pleasures and pains. In and as every finite Centre, the Supreme Being *does* feel its pleasures and pains, its trials and tribulations; but He feels along with it an infinite background of Joy or Bliss which is an actuality to Him, but only a possibility or ideal (something actually given but veiled and unrealized) to the finite Centre.

A finite Centre can essay to realize this possibility of Perfect knowledge, Action and Joy in it by pursuing a method of "culture" that may be broadly described as of a double nature. The reality of its Self is the Continuum-Point which is but the Absolute Being-Experience-Whole regarded from the view-point of creative evolution. A Centre's goal is, therefore, Self-realization. Now, this goal can be sought to be reached either by a method that starts with the Continuum

or by a method that starts with the Point. A Centre has a Continuum-phase as well as a Point-phase. Both these are practically "measured and limited"; in other words, a Centre does not commonly appreciate itself either as the one or as the other. It may begin *such* appreciation (that is, as the Continuum-Point) with reference either to the Continuum-phase or the Point-phase.

In either case, however, the object is attained to the extent that "measure and limit" (that is "bondage" [1]) can be done away with. The direction in the one method is different from that in the other in this sense that in the former (Continuum-phase method) "the releasing and liberating" force apparently acts *transcendentally* to the aspirant Centre, and in the latter (Point-phase method) it acts *immanently*: in other words, in the former it appears to act from *outside*; in the latter, from *inside* or within.

In either case, again, the operation may be conductive or *inductive*—a distinction that has its illustration in the field of Electricity. In conduction between two substances, A and B, the charge which passes from A to B is of the same sign—charge flows on from A to B. In induction A's charge "evokes" or evolves in B a counter-charge, that is, a charge of a different sign. The method of Prayer and Worship of a Divine Intelligence, Power and Love is a method that we may describe as *conductive dynamism*: Power, Light and Bliss is sought and drawn from an Infinite Reservoir where they co-exist. What Prayer or Worship does is to cut a channel between a finite Centre and the Supreme Centre for a "current" from the latter to flow in; and once communion is effectively established, current must flow in so long as a "difference in potentials" remains—that is, so long as the Centre in question is not assimilated to the Supreme Centre.

[1] Bandha.

On the other hand, the method is *inductive dynamism* whenever the object of worship is something in which the Infinite Reservoir is latent rather than patent—in which, that is to say, God is in some sort of an " abode " with His " face " (or " sign ") turned away in relation to the conventional frame of reference of a worshipping Centre. Thus the sky, the air, the starry heavens, the sea, the earth, the dawn, time, radiant energy, the universal " food " and so on—each is an abode of *Brahman*, presenting to us a " measure " of its immensity and each may be, and historically has been, in " savage cultures," in many, if not all, by-gone and living religions, objects of " worship " (which is an inappropriate term to express the Vedāntic idea of Upāsanā). The Sanskrit word literally means placing or putting *en rapport*, establish communion.

According to Vedāntic Principles, Brahman is and in everything. A thing is not the " created " only as distinguished from the " Creator "; " small " and " lowly " only in relation to what is High and Great. It is only conventionally " small " and " lowly ", and so forth. And this means that the Immense Being-Consciousness-Joy-Power is in a Centre with a partly *plus* but mainly a *minus* sign—that is, partly evolved and manifest, but mostly involved and unmanifest. The minus sign makes it, conventionally, a " little knower " and a " little doer ", or even a dead, unconscious, inert thing. Now, it may be, and in fact has been, the object of worship to change the *minus* sign into *plus*—to make the " dead and petrified " *Brahman* in the sky, earth etc. " living and responsive and congenial ". We shortly here indicate the Vedāntic basis of *Upāsanā* both of the Supreme Intelligence as such and of the " Objective" epiphanies (the shining beings=Devas) of the Divine, such as the Heaven-Father, Earth-Mother, and so forth. This is a most interesting topic which, however, we cannot here pursue further. The conductive and inductive varieties of the Point-emphasis method we shall briefly refer to in the next Chapter.

XI

BRAHMAN AND REALITY

In the last Chapter we were dealing with the two methods of self-realization by a Centre. As the Continuum-phase method may be either positively "signed" or negatively "signed," so may be the Point-phase method. In the former kind of method, it should be recalled, a Centre addresses itself to the *Brahman* in its phase of *extensive* immensity; in the latter it addresses itself to it in its phase of *intensive* immensity—the "limiting position" of which is the point. Either may be of two kinds according as the Continuum or the Point is adopted in its patent form or in any of its latent, "veiled" forms. The sky, the earth, the fire or universal radiant energy, and so forth are the latent, veiled forms of the Continuum of Fact or *Brahman*.

The Upaniṣads have again and again sought the *Brahman* in and as the Sky or Æther, the Fire, the Waters, the Life, the Mind, and so on; and the method followed by the aspirant under the guidance of his *guru* is the method of progressive realization. The *Brahma-Sūtras* of Bādarāyana which, in a considerable measure, devote themselves to the discussion of these "revealed" texts, have sought to establish that the Æther, Air, Fire, Life, Mind and so forth, which have been the objects of the last quest in the Upaniṣads in many places, are not limited, measured and defined objects, but are to be understood as visible representations of the measureless immensity of Being-Power; that they are not things

other than *Brahman* (or the Whole) which is impossible, but they are the *Brahman* under certain pragmatic, conventional limitations (that is, measures and definitions). The famous Nārada-Sanatkumāra dialogue in the seventh Book of the *Chāndogya Upaniṣad*, and many other beautiful and inspiring revealed "stories", illustrate the progressive method of Brahman-realization as pursued from immemorial antiquity not only in India but, to some extent also, in other parts of the world. This is the Continuum-phase method in so far as it pursues the *Brahman* in its aspect of extensive immensity such as is illustrated in the Space-Æther, Time, Universal Fluidity or Mobility,[1] Universal Radiation,[2] Cosmic Life or Mind,[3] and so forth. The method will be positively "signed" where the *Brahman* as patent Being-Consciousness-Joy-Continuum is *directly* sought in worship, devotion or knowledge by a Centre; it will be negatively "signed" when it is sought *indirectly* in and through such continua-representations of the *Brahman* as we have in the Space-Æther etc. in which the Whole (as Perfect-Being-Consciousness-Joy-Play) has more or less "hidden" (that is, "negatived", "oppositely signed") itself.

The Point-phase method, pursued to the last, also leads to the same goal. Because the Point *is* the Continuum regarded as the possibility of creative evolution. This method is positively "signed" (that is, *conductive*) where the object is the Absolute Ego or Self *directly*. The Ego or Self or "I" represents, it should be remembered, the Point in the Centres that have evolved self-consciousness, but the *principle* of the Ego is in every Centre, even in an atom of hydrogen or oxygen; and *the principle of the Ego is the possibility of measuring out or defining a more or less permanent field or sphere with reference to a*

[1] Vāyu.

[2] Tejas, Jyotiḥ, Agni.

[3] Prāṇa, Hiraṇya-garbha.

relatively persistent core or nucleus: and when such a persistent core or nucleus is projected into our pragmatic consciousness, we call it 'I', "Ego" or "Self", and the field or sphere organised and co-ordinated by it and associated with it, its "universe", or in a restricted scope, its "body" or "apparatus".

Now, the Absolute Ego or Self is the core or nucleus that has organised about itself the *whole* universe of Being-Experience or the entire system of correlated Centres, each with its relative, "limited" Ego or Self. If a Centre seeks to hold communion with the Absolute Ego *directly*, the method will be a *conductive* or positively "signed" method. The Absolute Ego is = a "condenser" of infinite capacity; the limited Ego is = a "condenser" of practically finite capacity. There is, therefore, a difference of potential between the two "condensers". If special connexion could be established between the two condensers, a current of the same sign would flow from the former to the latter.

The capacity of a finite Centre is determined by the nature of what we have previously explained as its "envelopes" or "sheaths". A certain envelope or sheath *means a given arrangement or scheme for a specific control of the ingoing and outcoming activities of the Centre*; it represents, therefore, a certain ratio of these two activities, a certain proportion of admitting and transmitting capacity to resisting and inhibiting capacity. We have "physical", "vital", "mental" and other "sheaths" as spoken of in the Upaniṣads. Each of these envelopes must be understood in the way above defined. The gross physical body is, for instance, an apparatus that can admit only external influences directly, and it resists others (in the sense of not admitting or responding to them); it is also an apparatus that transmits to the environment only certain inner activities directly and it checks or inhibits others. The vital and other finer envelopes are of higher

"efficiency-index" as compared with the gross physical envelopes. Not only we, but all Centres, have their envelopes as here defined.

Now, the capacity of a given Centre in respect of a certain kind of activity or influence (taking it in or giving it out) will be the measure of its practical "saturation point". A Centre draws in a quantity of power from outside and becomes "saturated" with it; all physical or non-physical objects have thus their limits of saturation. Concrete examples from every field will readily suggest themselves to our minds, but we need not especially mention them. When the limit of saturation has been reached, two things may happen; either the Centre will admit no further influx of power from outside--in which case, though its efficiency has increased, it will remain the same Centre with the same arrangement of envelopes or the same apparatus; or, the influx of power may be of such a kind and such intensity that the envelopes themselves or the apparatus itself will be rearranged or reconstituted—expanded in capacity, bettered in co-ordination etc.—which, practically, will mean the growth, development or evolution of the given Centre. And the process continuing uninterrupted and in the same "sense", the given Centre will ultimately realize the Absolute Ego. This we may call the Point-phase method positively and identically "signed", or *conductive*.

But instead of the Absolute Ego direct and patent, we might start with *any* representation of it, say, with an atom of matter or a microscopic cell. The physicist *has* started with this; and indications are increasingly becoming clear that he is already on the way to the discovery of the "Point" (as we have conceived it) in his corpuscle of matter and life. He has already discovered the exhaustless magazine of Power, so long unsuspected (but familiar in the Upaniṣads as the *Dahara-Brahman* or "Little *Brahman*") in the tiniest grains of matter or

life. But he was not in a position to make *all* this tremendous latent power practically available to him or any other Centre. The Power in the grain of dust is "seen", but it is still, for us, "coiled up"—the "Serpent Power". This means that the Power in it exists with its "sign" changed in relation to us. If *our* dynamism (practically operative) be of the positive sign, *its* dynamism (vast as it is) is of the negative sign.

Now, if a method can be devised and pursued whereby *its* dynamism can be practically increased by the influence of *our* dynamism, and *our* dynamism can be increased by the influence of *its* dynamism (as, for instance, in the Leyden Jar Experiment in Electricity), and if this mutual influencing and "vitalizing" can be made to go on till the two "condensers" have accumulated so much power that the "medium" or gap can no longer keep their "charges" apart, but gives way to "ejects" passing from the one to the other, and thus ultimately leading to their fusion or union;—then, in this case, we have the Point-phase method of the *inductive* kind illustrated. The physicist, as we have seen, is already on the way to a practical recognition of this method leading to the sort of dynamic transaction and rapproachment between one Centre and another, however apparently "small" either or both of them may be. This method is pregnant with vast potentialities, and has its application in fields other than the physical also.

We must now leave this highly interesting question of the methods of Self-realization. In the last Chapter we began exhibiting the *Brahman* in its four phases or aspects. We have now dealt with them in their essential features. *Brahman* as the unchanging and unmoving Continuum of Being-Consciousness-Bliss is the first phase. This in the sense of Pure Æther of Being, Undifferentiated Consciousness and Bliss, ought to be patent to ordinary intuition also; because, the

Pure Æther though transcendentally (that is, free from all particular modes or determinations) is realizable in *Yogik* intuition which represents the "limiting position" of a practical method of mental abstraction, concentration and "dissolution",[1] it is also *immanent* in all our ordinary pragmatic universe of experience—which immanent Pure Being-Consciousness-Bliss has been spoken of in the first Book of the *Chāndogya Upaniṣad* as the Space-Æther "greater than everything" and the "ultimate resort of everything"[2]; and it has been searched after and recognised as the "Abode or Place of *Brahman*"[3] in the well-known dialogue between Gārgi and Yājñavalkya in the Bṛhadāraṇyaka Upaniṣad—a "place" that pervades all being but which is not itself pervaded.

To western introspection, generally, neither the transcendental nor the immanent "Pure Æther" has been patent. A "witness" Self noting, if not constituting, every relation (here and there, before and after and so on), but not itself being one of the terms related, has not been an altogether unrecognised conception in the west; but a pure, placid, formless Æther of Being-Consciousness as a permanent frame-work for all the kaleidoscopic changes of form—the "space-Æther" (elsewhere spoken of as the *Bhuman*), and the "Place of Brahman" above referred to—has, generally, remained unsuspected and unheeded in western psychology and metaphysics.

The reasons for this are not far to seek. Since the days of Bacon at least, the "in-door" intuitive method, as a possible and effective instrument of psychical and philosophical research, has remained more or less discredited, and the claims of the *a-priorists* and rationalists have not been very seriously entertained. The rationalists themselves have also

[1] Citta-vṛtti-nirodha; Unmanī; manolaya.

[2] Jyāyān and Parāyaṇam.

[3] Brahmaloka.

trusted their method without a knowledge or suspicion of its great potentialities as evidenced by *Yoga* (the "mystical" and yet practical extension and development of the method of intuition), or even without an adequately correct conception of the nature and scope of the method as now exhibited by some of the exponents of "anti-intellectualism" to-day.

In India, on the other hand, as also in many other lands with a tradition of ancient wisdom, the Supreme Experience has been placed beyond the realm of analytic and discursive thought. It is not one that can be established by argument.[1] It must be *actually* realized. The real emphasis is, therefore, laid upon experimental realization. The Upaniṣads unmistakably indicate that it is so. In the eyes of theoretical critics, the Upaniṣads have presented the appearance of a loose, unorganised body of theosophic and cosmogonic conceptions—more or less intelligent and enlightened guesses at Truth which, as yet, are neither certain nor consistent. Now, this is wholly a misconception of the nature and scope of the Upaniṣadic method. Two different teachings in the Upaniṣads commonly refer to different stages in the progressive realization of Truth—they are far or near approaches to Truth. They must no more be set up as inconsistent, irreconcilable than, for example, the Newtonian formula of gravity and the Einsteinian formula, or Kepler's statement of the first Law of Planetary Motion and a subsequent and more accurate restatement of it. A first rough sketch of the ways of nature and a fuller and more detailed sketch are, practically speaking, "stages" in the advance to Truth, and a scientific or philosophical discipline which records these progressive but different stages, must not be thought of as a bundle of inconsistencies or as a mere flash-light show of meteoric brilliant guesses and stray lucid intuitions.

[1] *Cf. Kaṭha Up.*, I. ii. 7, 8, 23; *Brahmopaniṣad*, 18. 35; *Maitri Up.*, VII. i. 2; *Bṛhadāraṇyaka Up.*, IV. iii. 14; III. iv. 2; *Taittirīya Up.*, II. 9.

The Upaniṣads undoubtedly claim that the "Pure Æther" as the placid background of all forms and determination *is* an actual Experience, immanent and pervasive in our common experiences (though practically ignored and unappreciated); and it can be actually realised transcendentally also—that is, beyond and apart from all forms and determinations. And there is really nothing in argument that can oppose this claim. On the contrary, argument, if not unduly weighted with and dominated by theory, will rather indicate that the "Pure Æther" as an unfailing and unbounded substratum of Being-Consciousness-Bliss (terms not to be restricted to their usual western senses) is a *prima facie* possible concept.

First: experience is always a continuum, and only practically a sensation or idea or a series. Second: the necessity of *thinking* is not the necessity of being or existing—that is, experience is not bound to be as thought represents it to be, the latter being a logical representation of the alogical. Third: the continuum or universe has a variable and varying content, but the patently invariable fact is that universe *is*, that it is experience or *consciousness*, and that it expresses a basic impetus or urge that cannot be wholly determined and measured. Fourth: that forms and determinations can be conceived away, but Being-Consciousness as such can never. Fifth: that in some actual states (both normal and abnormal) we come very close to the state of general, undifferentiated consciousness. Sixth: psycho-physical parallelism does not absolutely require that consciousness must necessarily be a particular consciousness. Seventh: nor does it absolutely preclude the possibility of consciousness existing and functioning in a particular or in a general state, apart from a physical organism. Eighth: subjectivity and objectivity are "poles" appearing in consciousness, so that consciousness cannot be awarded to the former as its exclusive possession or phenomenon, and,

therefore, bearing *its* character and complexion, necessarily and intrinsically.

Ninth: mind and matter are also co-operators appearing in consciousness; so that it is not the exclusive property of either, and is not necessarily and intrinsically determined by the relations—properties and accidents—of either. Tenth: the mutual action and re-action of mind and matter requires a co-essential medium for each to exist and stress in, and influence the stressing of the other. Eleventh: different mind-centres in order to interact presuppose not merely their physical envelopes or organs (as is apparcntly the case), but a common, pervasive medium or "mental continuum" which, ultimately, is the Being-Consciousness-Continuum. Twelfth: the constitution of Being-Experience in the planes of matter, life and mind suggests a continua-series, each higher term of which is more universal and pervasive than a lower term, and this undoubtedly suggests a Perfect and Pure Continuum which cannot be anything else than Being-Consciousness.

Thirteenth: as subjective consciousness is but a measuring out of Consciousness as such, so subconsciousness and unconsciousness are also forms and states of Consciousness itself, but not *relevant* to the conventional universes of particular Centres or Subjects. Fourteenth: the constitution of things suggests the plan of Centres (as positions in the straining and stressing curve of the Continuum-Point), and Centres, as their definition shows, are inconceivable without a universal medium of Being-Power which evolves into a system of correlated Centres and may dissolve them all in itself, and which, therefore, is, in that respect, distinguishable from all Centres as their Primary Basis and Finale.

Fifteenth: psychological analysis of cognitive, affective and conative states suggests a common, "indifference" Basis of the ordinary pragmatic bifurcations of the knower and the

known, the pleasurable and the painful, and the agent a the patient. Like the α, β and γ radiations sprouting ou of a radio-active substance, a Substance, which is segmentally a mentative substance, sprouts into the triple manifestation of cognition, feeling and volition, each of which is, again, bipolar—knower and known, pleasure and pain, agent and patient. Underlying each bi-polar structure there is neutral, undifferenced cognition, feeling and action, and these three, also, mingle into a common Trunk and Root of Being-Consciousness-Bliss-Power.

Sixteenth: existence in forms other than the mental, such as the "merely" living and material, is also a growth out of the same common Trunk and Root, and involves (and possibly also *evolves*) Consciousness-Bliss-Power, although its evolution in that line may happen to be irrelevant to the scope of the convention of a given class of Centres such as ourselves. And the fact that all these infinitely varied and diversified forms of existence—mental, "merely" living and material—meet and start from, and have their basis in, a common Trunk and Root, indicates that that common Trunk and Root is of a sufficiently universal, undifferentiated, comprehensive and fundamental character.

Seventeenth: "Matters" and "Forms" are so infinitely diversified, and are often so flagrantly inconsistent, that their common "denominator" or basis can only be conceived to be Being as such, Consciousness in the sense of manifestation as such, and Power to infinitely diversify itself as such. Only Being-Power as such can be conceived to be the common Root and Trunk. Between an yonder rock actually seen and a "castle in the air" fancied; between an emotion in the mind and the perihilion of Mercury; between Gauss's "Curvature" (K), or J. Bolyai's formula which the late Prof. Bonola calls "the key to all Non-Euclidean Trigonometry", and such an apparently contradictory notion

as a square circle; and so forth;—the common factor is *being* (not in the sense of reality which is a pragmatic definition and appreciation of *being*); and this *being* is manifested in and as Consciousness; and, further, this *being* is Power to move and evolve as a manifold. As Being in this radical sense is independent of reality and unreality, so manifestation in Consciousness is also here independent of latency or patency, and of the apprehension and appreciation by any Centre; and the associate Power is also independent of the reference to any Centre. This means that Being-Manifestation-Power as the common Root or Trunk is the neutral "indifference point" of the poles of reality-unreality, of latency-patency and conscious-unconscious and subjective-objective, and of cause-effect and agent-patient.

Eighteenth: all the continua involved in our experience, such as Space and Time, though involving measures, are based on an intuition of what in Indian Philosophy is called *vibhutva*—a term that we can translate as "unboundedness". Philosophers and mathematicians have raised the question—Is Space finite or infinite; Is Time finite or infinite? And Riemann's distinction between "unboundedness" and "infinite extent"—if clearly grasped—will remove a great deal of the confusion underlying the abstruse controversy. As the distinction has the sanction of Vedāntism, we shall do well to quote Riemann's words (as translated by Clifford) in extenso: "In the extension of space construction to the infinitely great we must distinguish between unboundedness and infinite extent; the former belongs to the extent relations; the latter to the measure relations. That space is an unbounded three-fold manifoldness is an assumption which is developed by every conception of the outer world; according to which every instant the region of real perception is completed and the possible positions of a sought object are constructed, and which by these applications is for ever confirming itself. The

unboundedness of space possesses in this way a greater empirical certainty than any external experience but its infinite extent (in the sense of measure) by no means follows from this; on the other hand, if we assume independence of bodies from position and therefore ascribe to space constant curvature, it must necessarily be finite provided this curvature has ever so small a positive value."

Professor Bonola, who gives this quotation in connexion with his attempt to introduce the concept of Riemann's space in his Non-Euclidean Geometry, observes: "What Riemann holds as beyond discussion is the unboundedness of space. This property is compatible with the hypothesis that the straight line is infinite (open) as well as with the hypothesis that it is finite (closed)". Now, this experience of the unboundedness of Space, as also of Time,—which possesses greater certainty than any other external experience—is the intuition of *Bhūman* or *Brahman*. And Space is a necessary "form" of external experience and Time of both external and internal experiences; it follows that the experience of unboundedness (however pragmatically veiled it may be) is the common and necessary datum of *all* experience, and a datum that is of higher certainty than any other.

But as Riemann truly observed, Space is not necessarily of infinite measure simply because it is unbounded; on the contrary, there are certain fundamental considerations (connected with the positions of bodies and curvature of space) which will go to prove as a highly probable hypothesis that Space is of finite extent (*i.e.* measure). According to the Vedāntic principles, both Space and Time are evolved by the self-measuring act of the Unmeasured Being-Power: they are specific Contracting Principles evolved by a fundamental Measuring Principle or Māyā. And though this Measuring Principle gives its evolutes "measures", it does not and cannot, suppress the essential unboundedness of Being. The

"measures" too, are due to, and understandable in terms of, a certain system of conventions or fundamental postulates made (*e.g.* in the above quotation from Riemann, we have two assumptions—1. independence of bodies from position; and 2. the constant curvature of space having ever so small a positive value). The Upaniṣadic method of reaching the Bhūman through Space and Time and Life, and Radiation, and so forth, is, firstly, the "purification" of the fundamental intuition of "unboundedness", and secondly, the abstraction or elimination of the conventional framework by, and with reference to which, Space, Time etc. assume their "measures". Now as soon as this purification and elimination have been effected, not only the unbounded but the unmeasured and undefined is made manifest out of the pragmatic "veils" of Space, Time and so forth. As purified and abstracted (from measures) in this way, it is the Pure Æther of Being-Consciousness-Bliss (statically considered) which (dynamically considered) is = Pure (*i.e.* unconditioned) Power to involve and evolve as a cosmos of variedly measured forms.

Nineteenth: as the experience of continua such as Space, Time etc. involves an intuition of unboundedness, so the experience of individual, "finite" things involves an intuition —however practically veiled—of what we may call "Pointness"; in other words, every individual thing, whether self or not-self, is experienced as a "swelled" [1], evolved condition of a Point of Being-Power. The sense of compactness, unity, coherence which characterizes the appreciation of a hill range or a panorama of undulated meadow, isolated rocks and scattered clumps of trees is, for example, an enlarged logical reflex or projection of the intuition of Point.

We, in this connexion, note what another great mathematician, Laplace, said about the Law of Gravitation, in so far as his observations are relevant to the matter under discussion.

[1] *Ucchuna.*

"He points out that one of its (Law of Gravitation's) most remarkable properties is that, if the dimensions of all the bodies of the universe, their distances from each other, and their velocities were to decrease proportionately, the heavenly bodies would describe curves exactly similar to those which they now describe, so that the universe, reduced step by step to the smallest imaginable space, would always present the same phenomena to its observers. These phenomena, he continues, are independent of the dimensions of the universe, so that the simplicity of the laws of nature only allows the observer to recognise their ratios." Referring to the astronomical conception of Space he adds. . . "thus the notion of space includes a special property, self-evident, without which the properties of parallels cannot be rigorously established. The idea of bounded region *e.g.*, the circle, contains nothing which depends on its absolute magnitude. But if we imagine its radius to diminish, we are brought without fail to the diminution in the same ratio of its circumference and the sides of all inscribed figures. This proportionality appears to me a more natural postulate than that of Euclid, and it is worthy of note that it is discovered afresh in the results of the theory of universal gravitation".[1]

Any finite or bounded existence can, in this way, be conceived to decrease proportionately in its dimensions, or increase proportionately in its dimensions, and yet, to an observer, it may remain the same existence governed by the same natural economy. Laplace was, of course, too "mechanistic" a philosopher to leave any loophole for "play" or even "design" in his conception of the celestial mechanique; and, on one occasion challenged by Napoleon as to the place of Divinity in his scheme, he is reported to have said that he had felt no need of a Divine Being for his scheme. Nevertheless, the postulate of proportionality on which he lays stress is

[1] Quoted by Bonola, *Non-Euclidean Geometry*, pp. 53-54.

important as showing that the absolute dimensions of things are irrelevant to their cosmic behaviour. For example, the dimensions of a chemical atom are very small as compared to those of our planetary system, and yet, within an atom the corpuscles may have a planetary scheme of arrangement and motion, and, to a proper observer in one of these corpuscles, the Lilliputian scale in the atomic system will not be suspected as Lilliputian. A bounded system being enlarged proportionately upon a Brobdingnag scale will not be suspected as Brobdingnag either by a proper observer.

The laws of the working of Being-Power, in fundamental cases, thus appear to be independent of 'our' dimensions: there is, for instance, no inherent impossibility in there being a cosmos or universe in an atom. In fact, what is regarded as the Lilliputian scale is so regarded only from a certain conventional frame of reference; and so is the Brobdingnag scale. Apart from reference to such frames, a thing possesses absolute measure and dimension; and this absolute measure and dimension—may mean either *whole* measure and dimension, or *no* measure and dimension—either, the Continuum or the Point. In both cases, it exceeds ordinary Space and Time. In other words, a thing as it exists and functions in the absolute plane is a thing that only partially manifests itself in Space and Time, but in its concrete Wholeness is *not* in Space and Time. The mathematician shows that "in ordinary space there are no surfaces which satisfy in their complete extent all the properties of the Non-Euclidean planes" (*e.g.*, those of Lobatschewsky, Bolyai, Clifford etc.). Nevertheless, there are certain analogies between them (compare, for instance, the idea of a geodesic and that of a straight line). The properties of ordinary space are obtained by making those of the *complete* space conform to certain limitations. For example, the ordinary Euclidean triangle has its three angles equal to two right angles. But this is true only

as a special case of a "geodesic triangle", but not true in other cases. The sum of the angles of a geodesic triangle on surfaces of zero curvature is equal to two right angles. But not otherwise. In Euclidean plane geometry and spherical geometry we treat of surfaces of zero curvature and surfaces of constant positive curvature; and these are *some* of the possible and conceivable cases.

It follows, therefore, that ordinary space relations are not mental construction only, or conventional in the ordinary acceptation of the term, but they are a section made by classes of Centres from a complete manifold in which subsist *hyper* space, *sub* space, *normal* space, as well as *no* space relations.

The complete manifold represents the level of the Continuum-Point that we have before explained. We spoke of the dimensions of the Continuum as compared with those of the Point: the latter was conceived by us as of infinitesimal dimensions in respect of extensivity, though of infinite dimensions in respect of intensivity. It should now be perceived that this style of speaking is permissible only from the conventional standpoint of Centres such as we are. In itself, apart from such conventional treatment, the Point is = the Continuum, and the Continuum is = the Point. The Point is the Potency to create or evolve, and though *we* cannot help conceiving such Potency concentrated into the smallest possible dimensions, and, therefore, distinguished from the Continuum, it does not follow that the Point is, *completely considered*, the smallest thing. Its smallness or infinitesimality is one manifestation out of many others, as the ordinary Euclidean space relations are only some of the actual relations of the Complete Space. Its infinitesimality is, however, not a thought-construction of ours, but it is a segmental property selected out of a complete Universe by Centres such as we are.

Two corollaries of this are important: (1) If a Centre is able, by any means, to place itself *en rapport* with the

Continuum-Point, it will find itself "at home" with the complete Universe which is only partially renderable is terms of ordinary space and time, (2) though every Centre is a Centre for free activity or "play", and, therefore, its action is, essentially and completely considered, undetermined, yet Supercentral (divine or human) "foreknowledge" of such actions becomes possible. In the complete Universe actions are *done* and *known* in a complete structure which *exceeds* ordinary space-time relations, and which, therefore, is only partially renderable in terms of such relations. A seer or a medium may, by placing himself "in touch" with the complete Universe through "intuition", know "future" events not yet determined; but in the complete Universe the events are not completely past, present or future; far or near; here or there. The seer has to render (in so far as such rendering may be possible) or "translate" his space-and-time-exceeding intuition into space-time relations—as for instance, one has got to translate a code message. This is an important question, but we do not propose to linger on it. We have, however, dealt with it a little more fully in another work (*Mahāmāyā*, written in collaboration with Sir John Woodroffe) to which reference was previously made.

Now, since the Point is = the Continuum, the considerations showing the latter as Pure Being-Consciousness-Bliss which, as Stress or Power, manifests itself as an Absolute and Complete Manifold (Universe), and, with respect to particular Centres in it, as a series of relative and finite manifolds, will also apply to the Point. That is, whether we start from the Continuum or from the Point, we cannot dispense with the Pure Being-Consciousness-Bliss-Stress as above explained.

In the mystical phraseology of the Vedānta a distinction is commonly drawn between the "Great Æther" and the "Little Æther", but the epithets "great" and "little" indicate merely that the "Æther" reached by the Continuum

door and that reached by the Point door are identical—equally unbounded and absolute, but are appreciated as great and little by a class of Centres.

We have dwelt at some length on the nineteenth point because of the unique importance of the issues it involves. In this, we have attempted to reach the Primary Basis of Pure Being-Consciousness-Bliss-Power (all these terms should be sufficiently widely and fundamentally understood, so that their meanings may not exclusively be restricted to their partial and special manifestations and appreciations in the finite Centres) through the Continuum or through the Point, and have found that we arrive at an identical position, which is a Pure as well as Perfect Universe, partially rendered and renderable, in the experience of finite Centres, in terms of space, time etc.[1] Unbiassed intuition on the nature of the Continuum or of the Point—the "large" involving itself into the "small" and the small evolving into the large,[2] from our standpoint—will not fail to exhibit the Pure Basis to which the play of cosmic elasticity is incidental. On the one hand, we experience fields of diffusion condensing into contracted regions approximating to points; on the other hand, we experience condensed being-energy in contracted regions radiating and "dissipating". Both these presuppose a given "stage" of operation, and we have an intuition (though pragmatically veiled and unappreciated) of this stage as the "Pure Æther" of Being-Consciousness-Bliss-Power.

Twentieth: in a previous chapter (the sixth) we tried to show the inseparability of "matter" and "form" and argued that they must be traced to a Common Root. Throughout

[1] In so far as Time is connected with Number, reference may be made to Richard Dadekind's work on Continuity and the Nature and Meaning of Numbers. *Cf.* also the work of Weirstrass, Kronecker and Cantor, amongst others, in the same field.

[2] *Sangkucat Prasarat.*

the greater part of that argument, matter and form were taken in their ordinary, empirical senses. A special quality such as green having, say, a circular form; a particular existence such as water having, say, a wave motion; a sensation varying proportionately to the stimulus; an idea or imagination having a particular structure; a reasoning having a particular logical form; an external motion being subject to the laws of motion;—these were our illustrations showing that matter and form go together and we found that this association is not broken whether we scale the heights of the great or descend into the depths of the small.

Nevertheless, there is another way of following the "matter line" and the "form line", which ultimately shows not that they separate from each other, but that they blend into an undifferenced alogical unity. On the one hand, we ask: What is the most universal and essential Matter in all the empirical illustrations we have taken or others that may be taken? What is the Matter of which all these may be regarded as modes, varieties or particulars? This is the question which Spinoza raised and every Philosophy raised, and it should not be imagined that it was merely love of pure abstraction that inspired such questionings. The quest after the most universal Being is no more fantastic and chimerical than the quest after the most universal and fundamental logical, mathematical and natural laws in Science. And if it not be an inherently absurd idea that the most universal logical concepts (terms and propositions) *generate* by their activity other concepts of lower grades of universality (an idea that has lain at the back of some of the most notable systems of western philosophy such as those of Plato, Hegel and some of the neo-logicians), neither can it be tabooed as an absurd notion that the most universal Being *evolves* by its own activity (and such evolution, as we have seen, is only partially renderable in terms of space-time) the whole

hierarchy of Being-genera-and-species, down to the merest particulars, if such exist.

Now, the most universal and fundamental entity in the Being line is Being-Consciousness as such which evolves—in the sense above explained—as a cosmos of genera-species-particulars. And the most universal and fundamental entity in the Form line is Will-to-be-and-become-a-free-yet-rhythmically-moving-cosmos.[1] It need hardly be said that both "Consciousness" and "Will" are terms that are not used, in this fundamental plane, in their current psychological senses. Plato did not mean by his "Idea" what we mean by it; and Schopenhauer did not mean what we mean by his "Will". These terms are used because in our psychological universe their meanings give us an approximate and partial rendering of the completely and absolutely real meanings better than those of other alternative terms such as Force, Impetus etc.

Our psychological consciousness is but a partial rendering ("section" as we before called it) of the complete, absolute Consciousness (Cit) both in Its pan-cosmic (*i.e.*, perfect) and in its a-cosmic (*i.e.*, pure) aspect. So are our psychological "will", "joy", "action", and so forth. In our universe of psychological appreciation, these are, more or less, divergent streams; but in the complete and absolute plane they meet; and in the pure, a-cosmic phase they form an identity. Thus: Pure Being = Pure Consciousness = Pure Will = Pure Joy = Pure Action. Concretely speaking, a block of stone is, for instance, being = consciousness = will = joy = action. To understand this fundamental identity is to understand the essence of Vedāntic thought.

From our analytic point of view, being-consciousness appears to present the statical phase of the block of stone; the last—action—the dynamical phase; and "will-joy" the "hidden" nexus or motive connecting the statical and

[1] *Cf. Bṛhadāraṇyaka Up.* 1. iv. 7.

dynamical phases of the thing. This hidden nexus is important as showing that at the root of every existence there is *Ānanda* and Freedom.

The Upaniṣads very commonly employ such familiar terms as *Īkṣā*, *Tapah*, *Kāma* etc. (all special psychical terms) to express fundamental Fact-operations. *Brahman* is thus said to have "seen" or "ideated," "done penance," "desired or willed" and so forth, to evolve the universe: and those cosmic operations should not be understood as mere ideal projections of processes not in themselves ideal, or as cosmic projections of processes ideal or mental in themselves. Materialistic or agnostic bias on the one hand, and idealistic bias on the other, have regarded the matter one way or the other. But the truth is that cosmic processes are the complete models of which ideal processes are partial renderings. "Penance", "desire", "seeing", and so forth, have, therefore, their non-ideal or extra-mental meanings also. Like the English poet Wordsworth, the Vedāntist will recognise "a spirit in the words"; but then, this "spirit" need not, in every respect, be made "in the image" of man.

The idea of projection, incidentally introduced, introduces one of the most hotly debated and imperfectly understood issues in the Vedānta—and for the matter of that, in every—philosophy; reality *vs.* unreality. The Texts of the Upaniṣads do not appear to make its solution clear, as they do not appear to make clear many another crucial point in the Vedānta philosophy, such as the nature of *Brahman*, of *Māyā*, of *Ātman* or Self, of *Īśvara* or Lord, of *Jagat* or World. Being a science of practical realization rather than of theoretical, doctrinal formulation, the Upanisads leave, or appear to leave, in an atmosphere of obscurity and indecision, the vital issues that confront and agitate the human mind; and accordingly, they have become the starting point of many a divergent and apparently conflicting line of interpretation. According

to Gauḍapāda-Śaṅkara, for instance, everything excepting the "Pure Æther" before explained—all differences, all forms and determinations are "unreal";[1] according to Rāmānuja (as he sums up his position in a few well-known verses in his Śrībhāṣya[2]) everything is "real".

Very much, of course, if not everything, depends on the definition of "real" that may be proposed. But however that be, it cannot be gainsaid that the "revealed Texts" which have been accepted as the final authority by the different schools of interpreters, have left the matter apparently open to question and doubt. The "Pūrva" and "Uttara" systems have no doubt developed a very ingenious methodology[3] for the correct interpretation of the revealed literature; but apparently conflicting interpretations and constructions have continued to be put upon the Texts, all this methodology notwithstanding.

On our part, we have, in these chapters and also elsewhere, attempted to look at the Texts not in their dogmatic *ensemble* and rigidity, but in their practical perspective and prospective; and we believe we have found a central running Thought round which other thoughts cluster. The idea of Brahman, Māyā, Self and the World, that we have, in general, and mainly modern occidental terms, set forth, represent what, in our judgment, may be called the "Main Axis" of Upaniṣadic Thought.

Now, with reference to this Axis we maintain that the Vedānta does not teach either the realistic or the idealistic view of reality as these views are currently understood, but that its teaching grasps a more complete and profound set of values. In other words, both ordinary realism and

[1] See "Cit-Sukhi", "Advaita-Siddhi" in particular, re: *mithyātva* of *mithyā*.

[2] 104, under *Brahma Sūtra*, I. i. 1.

[3] Nyāyamālā.

idealism are partial renderings of a more complete and fundamental import of Reality which the Axis underlies and bears.

We introduced the suggestive idea of projection. Evidently this idea cannot apply to *Brahman* considered as the Absolute Whole. There is simply nothing *else* into which or upon which *Brahman* should project Itself: there is, therefore, no possibility here of introjection or of projection or of ejection. At any rate, that is how we must understand or appreciate the matter. These operations are understandable with reference to something which is bounded or measured. When any kind of dichotomy, diremption or polarity has appeared—at any rate, to our logical appreciation—such operations become conceivables. The Continuum is = the Point = the Unmeasured, as we have seen; yet, since to our analytic thought, they define, and, therefore, " bound ", each other as poles, it is possible to conceive the one involving itself into the other and the latter evolving itself into the first.

" Section " is a more logically appreciable idea in regard to the Whole than projection or ejection. The Whole is in a section and yet exceeds it. If the Whole be defined as absolute reality, then the section or part must be regarded as real also, though not in the complete sense. A section is a particular determination—defining and measuring—of complete reality. A given section may thus, for example, determine complete reality in terms of ordinary space and time: it accepts and appreciates *so much* of the completely Real.

Suppose for the sake of simplicity we consider the sections of an ordinary cone (excluding the consideration of developable surfaces). Let the base plane of the cone represent the Continuum, and its apex the Point. Let the vertical line from the apex to the base represent the Axis of Standard Position with respect to which the inclination of a given section made of the cone has to be estimated. A circular section of the cone will have right or normal inclination to

the Axis. Other kinds of sections, such as elliptic, hyperbolic, parabolic will have what we may call their characteristic "eccentricities". If the whole realm of reality be represented by the cone, then the base and the apex—the Continuum and the Point—comprise between them the entire realm. A circular section will comprise a *part* of the entire realm, but that part will be a correct or right segmentation of the whole; in other words, such a section will contain a part of reality, but that part without "bending". It is a section, therefore, in which veiling is still there inasmuch as it is a section and not the Whole; but in it there is no "bending" or special "treating" of reality. The bending co-efficient has been called by us eccentricity, and, after the analogy of the human Centre in which eccentricity is variedly illustrated, we may call its components "like" and "dislike". Every Centre human or sub-human has its characteristic eccentricity represented by its "likes and dislikes"; which ordinarily makes a Centre not a "circular" segment of the complete cone of reality, but an elliptical or hyperbolic or any other kind of segment, showing an eccentricity with respect to the Axis or the Standard previously explained.

The Main Axis or the Standard represents, as explained in one of the Supplementary (Appendix) Lectures, the "Revelation" on which the Vedānta Philosophy is based. The circular "cuts" without eccentricities represent the "received" experience of the Seers; and the more or less eccentric "cuts" are the individual, personal experiences of Centres.

To get a right "section" of Reality, eccentricities must be reduced to nil, and to get the complete Reality itself, the entire "cone" subsumed by the Continuum-Point [1] (Base-Apex)

[1] The idea of the Continuum-Point, more plainly and orthodoxly stated, is the idea of Īśvara or Lord *in its essence*. It is uncritically thought that *this* has hardly any *locus standi* in the Vedāntic Scheme of Reality (which is 'veiled' atheism and nihilism). This is total misconception. In the Māyā-vāda form, to which alone the allegation *seems* to

must be possessed. The entire cone is, of course, an infinite cone; still, it must be a cone with the polarity of Base-Apex in order that it may be spoken of as Reality. In the unbounded *Brahman* which is larger than even an infinite cone, the question of reality and unreality does not arise. It is the Supreme, Absolute Fact.

apply, *Brahman* is both *Saguṇa* and *Nirguṇa*, and though the latter must be realized as the Pure (*śuddha*), *Ādhiṣṭhāna* ("Basis"), the former is *not our adhyāsa* ('ascription' or 'construct'). It is the Absolute Brahman 'positing' Itself as the Wielder of Māyā (*Māyādhīśa*) for world manifestation; or as we have said, the Absolute Alogical defining Itself as Perfect Reason and "Person".

XII

REALITY AND VALUE

We introduced the question of reality towards the end of the last Chapter, and developed a suggestion, analogy of the sections of a cone, as to how reality may be conceived from *four* standpoints. In the first place, reality may be conceived either alogically or logically. Alogically, reality ceases to be the antithesis of unreality, but becomes co-extensive with *all* Being; it becomes the same as *Brahman* or Fact. And this Fact, with capital F, is, as we have seen, all-inclusive: fact, theory, fiction, and even *nothing*, and what is worse than nothing—self-contradictory ideas, such as the square triangle, *are* in the Fact; and, with respect to *this*, they possess a Being which is impartial and homogeneous. This plane of alogical Fact-ness is indicated clearly by such remarkable identities as "All this, verily, is *Brahman*", "*Brahman* is above, is below . . .", "All this is real", and so on, that are commonly met with in the *Chāndogya*, *Bṛhadāraṇyaka* and other Upaniṣads. A square triangle *is*, just as a patch of dusky cloud there, is; and the distinction we make between the former existing in fancy or speech only and the latter existing in actual perception, is one that is indeed practically most important and useful to us, but it does not affect the *being* as such (that is, with reference to conceptual, perceptual or any other pragmatic plane) of either.

Logical reality exists where the polarity or antithesis of real and unreal exists in appreciation. This, therefore, must

be distinguished from the Fact. In any logically coherent universe, for example, a square triangle cannot really exist. Such a universe must have a character defined by certain fundamental concepts of logic of which the Laws of Identity (A is A), Contradiction and Excluded Middle are some of the fundamental ones. Certain other Laws of a purely Mathematical character (*e.g.*, $5+7=12$), also certain other "mixed" generalisations *e.g.*, the Laws of Motion, (whether or not of the Newtonian brand) must, as we conceive, also "govern" this universe.

This is expressed in the Vedāntic literature by the familiar couple "Ordered Real".[1] In the well-known cosmogenic hymn (X. 190) in the *Ṛgveda* it is stated that the "Ordered Real" or "Law-abiding Real" was first produced out of the "penance" of the Primordial Being-Power. This "penance", as the *Muṇḍaka* and other Upaniṣads explain, is cognitive or rather recognitive act: it is the same as "ideation" (in Plato's sense rather than in the sense of common psychology). This, in plain terms, means that the Alogical and Unmeasured and Undefined becomes logical, measured and defined by this act of recognitive appreciation. As the foregoing chapters have shown, this operation is repeated every moment in the experience of every "conscious" Centre: the alogical universe of intuition becomes thereby a universe of logical appreciation and discourse. This is the birth of the "Ordered Real" in us. How the logical offspring is, in fact, affiliated to the Alogical Parent—is a point that we have already previously discussed.

Now, this logical reality—which is a structure imbedded in an alogical mass, which makes the latter *exceed* the former by "the measure of ten fingers"—may be either perfectly appreciated or imperfectly appreciated. To an Arch-Intelligence the entire "cone" of complete logical reality will

[1] *Ṛtanca Satyanca.*

surrender itself without breaking or bending. To imperfect intelligences (in which we now include the individual's sensoria, mind and reason), the cone will either "break" (*i.e.*, become segmented) without "bending", or, as is usually the case, will both break and bend.

Since we are imperfect intelligences (the word "Centres" that we persistently employed is better), our acceptance of the "cone" is both segmentary and eccentric. Every Centre cuts a particular curve out of the cone; and the main determining factor of the equation of that curve is what we have previously called the *Karma* of that Centre. By *Karma* we do not mean simply what is meant by volition or even by action. It is the essentially undetermined (free) impetus or urge of *Brahman* stressing *in and as* a given Centre. It is essentially and fundamentally Play out of Joy (*Līlā* out of *Ānanda*).

At any moment a given Centre has a given position in the Cosmic configuration. This position may be regarded as the "Origin" with reference to which the curve described, "cut" or otherwise determined by that Centre has to be appreciated. From this "Origin" start any number of "co-ordinates", of which we may broadly distinguish three: (1) the given configuration of all other Centres in an order of co-existence; (2) the "geodesics" of motion of all other Centres making an order of cosmic movement; and (3) the "geodesic" of *Karma*, as previously defined, of the given Centre itself. The first is called in Indian Philosophy *Dik-Śakti*; the second, *Kāla-Śakti*; and the third *Karma*. It is evident that the curve described by the given Centre is determined with respect to these three co-ordinates and what we have called the "Origin". Of these four, the three other than *Karma* may be called *Adṛṣṭa* (in an extended sense of the word).

The above is a complete statement of the case. Practically, however, a Centre's geodesic is determined by its own

karma and those of others which are in its " dynamic neighbourhood ". For example, if we interpose a card between a magnet and some iron filings, the card will not be drawn to the magnet, but the iron filings will be, although these latter will fail to reach their objective on account of the intervention of the card. Here the iron filings and not the card are in dynamic neighbourhood with respect to the magnet. In this way, a sun spot may be in dynamic neighbourhood with respect to a magnetic storm on earth. Or to take a more homely example, two friends or lovers living " poles asunder " from each other are, nevertheless, living in dynamic neighbourhood to each other.

Now, the position (" Origin ") of a given Centre includes its apparatus of experience—feeling, acting and knowing. And since this position is determined by the sum of previous *Karma*, we may say that the curve described by a Centre is determined by its own *Karma* and those of other Centres, and practically, of those Centres that are in dynamic neighbourhood in relation to it. It follows, therefore, that a Centre not merely feels and acts, but knows and appreciates, in accordance (mainly) with its *Karma*.

It is this that " breaks " and " bends " the cone of reality for it. So that *its* reality is, commonly, not merely a partial, but a more or less eccentric rendering of Complete Reality. By " eccentric " we mean " deviation from the right orientation "; and by " right " we mean " in the same sense as in the Complete Reality as possessed by the Perfect Centre ".

The term " sense " will require a bit of explanation. Suppose we consider the different ways in which a circle may be looked at by us. In the first place, we look and see it as it is. This we may call the *right* sense of taking it. In the second place, the radius of the circle is decreased, or enlarged in the process of our inspecting it, so that we do not see the

given circle as it is, but a smaller or a larger circle. Here the sense may be called *symmetrical* and *proportional*—since, in this second case, the dimensions of the given circle have increased or decreased proportionately. In the third place, as we look we see but a segment, say, an arc only, of the given circle; and the arc may be seen as it actually is in the circle, or proportionately increased or decreased. Here the sense is still symmetrical, but *partial* or *segmentary*. In the fourth place, the given circle may be seen by us not as a circle as it is,—larger or smaller—, not even as an arc of a circle, but, say, as an ellipse or any other curve having an eccentricity. Here the sense is *asymmetrical*. All these four cases refer to the given circle in its given plane.

Besides these, we may also consider the projections of the circle on other planes, or consider it in the complete space of which the ordinary Euclidean space is a particular determination. To take the classical example of Parallels: the Euclidean parallels possess the three properties—(*a*) they are coplanar; (*b*) they have no common points: and (*c*) they are equidistant. Now, the elimination of the third condition will make parallels a wider concept--a concept especially studied by Gauss, Lobatschewsky and Bolyai. And the elimination of the first condition—coplanarity—will make it an extended concept in another way, especially studied by W. K. Clifford.

We may subsume all these cases under three categories: (1) A thing is studied in its own position; (2) it is studied in its projection in other positions; and (3) it is studied as an illustration of a more general, extended case, or as a general case itself of which others are particular illustrations. We may call these three Positional, Projectional and Evolutional standpoints respectively.

These different standpoints together with their subsumed cases—of which four have been indicated by us under the

first category—represent the different "senses" in which Truth—which is the value of the apprehension *and* appreciation of Reality—can be realized by a given Centre. And we may observe that the three views of Truth that Philosophy has generally taken, *viz.*, Truth is the relation of Identity between Experience and Reality; that it is correspondence between them; and that it is coherence or freedom from contradiction;—these three are correlatable respectively to the Positional, Projectional and Evolutional standpoints that we have just briefly explained.

My knowledge of a circle is true if it is as the circle is in its position. My knowledge of A projected on B (*e.g.*, its influence, image or effect on B) is true, if the projection of A on B (say, A′) corresponds to A, and if my knowledge of A′ is as A′ is. And, finally, my knowledge of A is true, if A can be deduced coherently from a "higher" concept, P, known or believed to be true, or deductively leads to a "lower" concept, Q, known or believed to be true.

This is a rough statement of the cases, into a fuller discussion of which we cannot here enter. It is worthy of note, however, that, firstly, the cases are not, strictly speaking, isolable from one another. And, secondly, that whatever may be said about the abstract rules, in their practical application we have to go by a certain standard, tacitly and pragmatically accepted, of inter-central convention. For instance, my experience of A never absolutely is as A is, and yet, we have learnt to practically ignore certain kinds and degrees of discrepancy, and regard two things or events as the same where their resemblances are, practically, of the required kind. Thus my perception of a tree there and your perception are regarded as the same, though in fact, they are *not* the same.

In the same way, correspondence to be the indicator of truth is defined with reference to a variable frame of practical

convention. Logical coherence is an absolute indicator no doubt, but it indicates only within the stretch of its tether: even if we waive the claim of actual facts to challenge the conclusions of ratiocinative processes, we have to remember that such processes start with an apparatus of fundamental premises or postulates which we are forbidden to challenge on the penalty of losing our logical universe itself.

It appears, therefore, that the practical valuation of Truth presupposes a conventional frame of reference. And since this frame is a variable one, the need is felt of a standard frame of reference which shall (1) reduce to nil the eccentricities of individual and group frames of reference, and (2) present the real, whole and entire. This, of course, is the Standard or Ideal, and this is the true meaning of *Veda* (from *Vid* = to know). But this goal is, under ordinary circumstances, only reached by stages, so that we have a series of logical values attaching to progressively ampler and higher efforts to reach the Complete Real. The Positional, Projectional and Evolutional types with their varieties are the relevant forms that we meet on the way.

This account of Truth is given in terms of the common "representative" view of knowledge. But that view, though analytically useful, is a superstition. In the Vedānta, Truth is not a representation of Reality, but *is* Reality, inasmuch as Experience *is* Being. The mistake of Idealism is that it first separates Experience or Consciousness from Things, then attempts to reduce these in terms of their representations (ideas) in the mind—to show that things are only the "cluster" or "complex" of these representations. But this is a surreptitious begging of the whole question. Experience or Consciousness should be so defined or exhibited that it may embrace things *as well as* representations of things as ideas in the mind. The perception of a tree, for example, should not be conceived as the mental representation of an actual

tree which is really not in perception. The perception *is* the real tree with only this difference that perceiving apparatus has made a partial, and commonly, a more or less eccentric section of the complete reality of the tree. It is one thing to take a quadrant of a circle, and another thing to have an image, reflex or any other kind of representation of the circle.

The Vedānta view of perception makes it clear that perceived things are not mere reflexes or representations of, we know not what, realities existing outside the mind, but they are the real things themselves. Upon the stimulus acting on the perceiving apparatus, the mind re-acts and actually goes out (along the line of least resistance) to where the exciting thing is, and becomes *identified* with it, subject of course to its reactive capacity; and this identification of mind and the thing is perception. In perception, therefore, the mind *is* the thing, subject to the conditions of its apparatus. In reflection and analytic thought, however, the mind may, and often does, distinguish its own "states" from things and events which are external. They *are* external, no doubt, with reference to the practical apparatus of a perceiving Centre; but in perception that apparatus makes a partial but actual section of that external universe of reals. This partial but actual section of the real (to which, therefore, the mind becomes identified to that extent) in experience is called in Vedānta *Vṛtti*: which is not a "subjective" state as such, nor an "objective" phenomenon as such, but the neutral identity of the two, *Jñāna* and *Viṣaya*, as the two poles, when differentiated, are called. In a famous passage, the *Bṛhadāraṇyaka Upaniṣad* calls this neutral identity intuited in perception *Brahman*.[1]

There has been a great deal of discussion in the Vedāntic Schools as to the character of what is called *false* knowledge *Apramā Bhrama* or *Mithyā-jñāna*. Admittedly our knowledge

[1] III. iv. 1, 2; III. v. 1; and elsewhere.

is false in illusions, hallucinations, dreams, and so forth. Using the classical term "*Khyāti*" for the *presentation* (and not *re*presentation which Indian realism has debarred) of Reality, we may consider its different cases as we have considered the different cases of making sections of the cone or inspecting a given circle. Indian Philosophy in treating of non-presentation of reality has distinguished six different forms, and these forms are important as being the indices of different Schools of Thought. It is possible to reduce them to two: *Akhyāti* and *Anythā-khyāti*; and these correspond respectively to *Partial* (incomplete) and *Eccentric* segment previously discussed by us. In the latter, the sense of the real is altered by the experiencing apparatus. In every ordinary case of experience, the apparatus is making a segment of the Real partially and eccentrically; and if *this* circumstance is understood as making all our ordinary experience *false*, then it *is* false, and even an out-and-out realist need not say, No. There are Vedāntic Texts which speak, in no uncertain accents, of the falsity of our pragmatic experience; but their meaning ought not to be misunderstood. Our pragmatic experience is false only in the sense in which, say, my lay perception of a leaf of a tree is false compared with the expert perception of the same leaf by the botanist under his magnifying glass. Certain things in that leaf have been "held back" from me, and probably also, certain things have been "taken in" by me in more or less altered 'senses.' Science is for "enlarging" the scope of lay experiences as well as for "correcting" the errors due to the eccentricities operative in them. The *Veda* is conceived as the Ideal or Standard of Experience thus progressively enlarged and corrected. All the same, the lay experience is an *actual* section or presentation of the real universe: it is *not*, a representation or reflex of, we know not what, scheme of beings ("things-in-themselves").

It is true that the *Māyā-vāda* School in Vedānta has laid stress on the falsity of common, pragmatic experience, and though the ordinary opinion recognises *three* orders of reality (*viz.*, the absolute, the pragmatic or conventional, and the seeming),[1] there is another which recognises but *two*, *viz.*, the first and the third, holding that there is no difference in kind between the conventional reality of a rope "truly" perceived and the illusory perception which makes it seem a snake. But all this, if the definitions are rightly grasped, does not make the world an "illusion" or "dream" in the sense such terms are commonly understood.

If by "real" or "true" in the absolute sense we mean pure and perfect Experience-Being ("pure" indicates that there are no eccentricities, and "perfect" indicates that there is no veiling or keeping back), then, two things are clear: first that no finite pragmatic experience is real in the absolute sense; and, secondly, that the distinction between the "real" perception of the rope and the illusory perception of the "rope-snake" is merely a difference in degree,—convention fixing up veilings and variations within certain limits as being generally true, and veilings and variations outside those limits as being false.

Māyā-vāda cuts its epistemological coat according to its ontological cloth. Its ontology is the "Pure Æther" of Being-Consciousness-Bliss to which we have repeatedly referred. It wants to absolutely seize upon this. Its definition of the Real is, therefore, "what changelessly abides for all time", and "what is the common element of all forms of existence". We have elsewhere subjected these definitions to a logical scrutiny; and here we simply observe that its theory of *Avidyā* ("Ignorance") involved in the act of perception, and especially of illusory perception, is fashioned in accordance with the needs of its fundamental conception of Reality.

[1] Pāramārthika (or Tāttvika), Vyāvahārika, Prātibhāsika.

This, therefore, is mainly a matter of emphasis and definition; if, for instance, emphasis is to be laid on A rather than on B, P would be the definition suitable for a certain thing or process X; but if emphasis were to be laid on B instead, Q, and not P, would be the suitable definition for X.

What is called the "inscrutable transformation of Avidyā"[1] is an epistemological view that has been so fashioned as to lay stress on the veiling and varying (*i.e.* altering the sense) character of the Measuring Principle which evolves all Centres and works their varied apparatus of experience. But if it not be required not to seize absolutely upon the "Pure Æther" aspect of *Brahman*, we may so frame our logical apparatus of concepts and definitions that veilings and varyings by individual Centres will be recognised in the conception of experience and reality, and yet, no exclusive stress shall be laid on them.

The Vedānta of the Upaniṣads, as distinguished from the *Māyā-vāda* interpretation of it (which, as we have seen, is intent upon emphasizing one aspect, and a fundamental aspect, of *Brahman*, and defines Reality and Knowledge accordingly), is the view of the Alogical (undefined and unmeasured) Fact to which, as such, the polarity of real and unreal does not apply; which, logically appreciated, is the Perfect Universe of the Continuum-Point or *Īśvara*; of which the "Pure Æther" of Being-Consciousness-Bliss-Power is certainly the substratum; in which a Measuring Stress is operative constituting a manifold of Centres, which represent, as before explained, so many "positions" in an infinite curve of involution-evolution "play" (connoting freedom on the whole and in detail); which Centres have their varied apparatus (developed by *Karma*) for the cognition and appreciation of, and action and reaction on, this scene of cosmic play; and which Centres, inasmuch as they are practically

[1] Anirvacanīya Khyāti.

finite and eccentric, have an experience and appreciation of reals that have a mixed and restricted, as distinguished from pure and perfect, character.

If this cardinal thought (before now called the "Main Axis" running through, co-ordinating and supporting the Vedāntic Thought) is not sufficiently realistic, we do not know what realism means. Some of the other Schools of Vedāntic interpretation have themselves laid sufficient stress on this *pan-realism* of Vedānta by bringing to the fore and discussing the "revealed Texts" indicating this, and joining issue, where necessary, with the Māyā-vādin in his *pan-illusoriness* or a-cosmism. But even this latter is a matter, as we have pointed out, of emphasis and definition.

We shall not further pursue this supremely interesting subject of the reality of Experience and of the Self and the World in this last Chapter. The Axial Vedāntic position—as distinguished from the special rendering by this School or that—is this: That All is *Brahman*, and All is Real; and it is only in the practical appreciation of this Centre or that, that some things or events *seem* to be unreal; so that what is seeming and "illusory" is this appreciation of the *unreal*. The *Śākta Tantra* (which represent a type of Vedānta, amongst some other types) particularly emphasize this, and what is more important, develop a system of practical discipline based upon the recognition of this, and designed and directed to its realization by the dispelling of the *avidyā* that some things are *not* real.

It should not be loosely supposed that *this* Vedāntic teaching, like the other extreme view represented by pan-illusoriness, undermines the vital distinction between the real and the unreal; that whilst the latter erased the first word, this one erases the second. It no more obliterates the useful and practical distinction between the two, than, for instance, Science by adopting Clerk Maxwell's Electro-magnetic Theory

of Light or, lately, that of the Electronic constitution of the Atoms, has obliterated the practical distinction between a candle and a horse-shoe magnet or that between a cylinder of oxygen gas and another of nitrogen.

When "All is real" is realized, the term "real" loses its ordinary, pragmatic meaning, but becomes so enlarged in meaning that it means either an element of the Fact-Whole (= *Brahman*), or a member of a cosmic logico-causal system. Such enlargement of meaning is familiar even in ordinary science. A dream, illusion or an hallucination is "unreal" from the lay standpoint, but to a psychologist it is as real a phenomenon as any other, having its conditions and consequences as good and genuine as those of any other. An unreal experience is thus a real event.

Nor is the distinction between Good and Evil, Beautiful and Ugly undermined or weakened, because the Complete Summing up of Being-Power which the Fact or *Brahman* is, *exceeds* (but includes) such characterizations. We cannot say, for instance, that *Brahman* as such is Good or Evil, Beautiful or Ugly, True or False. All these polarities *are*, however in *Brahman*. One of the remarkable "absurdities" in the Upaniṣads, Tantras and Purāṇas is that *Brahman*, or for the matter of that, any "god" or "goddess" in his or her character as *Brahman* (we have seen that even a dust particle has its *Brahman* character, which is its real and essential character, pragmatically veiled and unappreciated), is almost everywhere described in flagrantly contradictory and opposite terms: movement, rest; smallness, greatness; unity, plurality; goodness, badness; joy, sorrow; freedom, bondage; beauty, ugliness; tranquillity, fierceness; and so forth;—in fact, all possible antitheses are applied with a view to indicating that the god or goddess, though practically appreciated as a defined Being, is really the unbounded, unmeasured Ocean of Being-Power in which all polarities and contradictories

meet, and out of which they all evolve. To limit a "god" to one set of categories only is to rob him of his title to being *Brahman*, the Absolute Whole Fact.

But a "god", and for the matter of that, God Himself—the Lord, Creator and Sustainer of the world—must be also, and in fact has been, conceived as Defined (*i.e.*, Logical) Being. It is not that *we* so conceive it: *Brahman* is the Universe of Continuum-Point with the manifold of "subordinate" Centres by defining Itself; and the Universe and everything would be inconceivable—Centres etc. could not be—if the Undefined Whole were not thus to define Itself. We as well as our perceptual-conceptual machinery subsist by reason of this fundamental defining operation. Now, Continuum-Point is the highest Being-Concept in the "logical line". And this Supreme Logical "Idea" (in Plato's sense) must be conceived as Perfectly True, Good and Beautiful; because the antithetic concepts of false, evil and ugly are in the nature of practical "obstruction" and negation, so that a Being-Power Who is conceived as Full and Perfect has no "reason" to be false, evil or ugly. It is a *defined* Power but not *divided* Power: It is the Whole Itself becoming perfectly Logical.

But since the Alogical does not cease to be Itself in becoming the Logical, every logical Being-Concept starting from the Continuum-Point retains Its Alogical setting or background; and the Texts want to emphasize this by painting the supreme Being as perfectly True, Good and Beautiful, and also as Undefined, Unmeasured Ocean of Being-Power into which all polarities and contradictories pour themselves.

Since, as we have seen, there are ample grounds for thinking that the substratum of Being-Power which manifests itself as the universe is Joy-Consciousness (conceived as before indicated), a pessimistic and mechanistic delineation of the cosmos is absolutely uncalled for. This substratum is

the *positive* and ineffaceable element of all forms of being-experience, even of those that are felt, pragmatically as joy-less, graceless and helpless. In fact, these latter feelings are feelings of limitation, impediment, obstruction to the positive, given, ineffaceable element of Joy-Play-Consciousness. Hence the Root of the world-manifestation cannot be conceived as being laid in joylessness, unconsciousness and mechanical necessity.

The fundamental teaching of Vedānta, instead of undermining the foundations of ethics, æsthetics and religion, lays the foundations deeply and unshakably. And it must be remembered that the Vedānta is avowedly and actually more a science of practical realization of the Highest Reality than a speculative philosophy. Its practical, developmental and mystical character is its essence, and not an accident that can be separated. And this practical character presupposes "competency" and "discipline" in the aspirant.

Not only those Schools of Vedāntic Culture that have laid stress on the Method of Devotion-Love-Service, on that of *Yoga* (in its various—commonly classified into four—forms), and on the Method of Mixed *Karma* and Knowledge, but even the Māyā-vāda School, which in its more prominent type, has stressed the position that the supreme Knowledge of *Brahman* is attainable by "hearing"[1] the "Great Propositions"[2] (inculcating the identity of Self, World and *Brahman*), distinctly lays it down as a precondition that the aspirant must be morally "pure"—sinless, passionless and stainless, and that he must receive the "Word" from one who has, like Sanatkumāra in the Seventh Book of the *Chāndogya Upaniṣad*, actually "seen" the Supreme Self. Otherwise, no competency for the fruitful hearing of the Word is

[1] Śravaṇa.

[2] Mahā-vākya: generally, counted to be four—"Ayamātmā Brahma"; etc.

established. Some professors of Māyā-vāda are not content even with this. They hold—as the *Bṛhadāraṇyaka Upaniṣad* in a famous Text lays down[1]—that *after* "hearing", not only "thinking" but yogic meditation is necessary for the attainment of the "beatific vision"—which "resolves all doubts, severs all the chains of the heart and the spirit, and reduces to the vanishing point the compulsory dominance of actions". It is clear, therefore, according to the consensus of Vedāntic thought, that the different Methods of Culture grow out of, and rest on, a common trunk which requires an absolutely pure and meritorious ethical life.

And the basic conception of the Self and the World—their nature and destiny—in the Vedānta requires that this life must have its keynote in virility and heroic endeavour. It is a misconception of the Vedāntic attitude—and even of the *Māyā-vāda* attitude—to say that weakness, inertness, zestlessness or dreaminess have any real place in the economy of Vedāntic culture. Even he who would realize—"I am Brahman"; "The world is my dream"; and so forth—must be "a hero of heroes". True renunciation such as has been preached by all great philosophies and religions of the world —for example, by Gautama Buddha, the *Bhagavad Gītā* and Jesus Christ—is not a cult of cowardly escape from the world and the struggles of life. What Lord Śrī Kṛṣṇa most strongly impresses on the mind of His friend-disciple Arjuna is that he must not lapse into "impotency" or passivity, that he must rise superior to all weakness and miserliness of the heart: that he must be a hero and conquer "desire", which is hardest to conquer. The Gītā is universally adopted in India as an authoritative statement of the Vedānta doctrine and Vedāntic culture; and different Schools have their own commentaries on the Gītā. Whatever construction may be put on the philosophical text of the Gītā, there is absolutely

[1] II. iv. 5.

no doubt that we possess the best and noblest presentation of the ethics of Vedānta in the Gītā, which is looked upon as the "cream of the Upaniṣads". It is also notable that western scholars and missionaries have not unoften sought to affiliate the teachings of the Gītā to those of the Bible. It is immaterial which is anterior to which, or which has borrowed from which; what *is* material is this that there has existed, from time immemorial, an ancient quarry of human Vedāntic Culture, which not only Hinduism and Christianity, but other ancient cultures and religions—in China, Egypt and Babylonia, for instance—have drawn upon. If the Sermon on the Mount can be affiliated to the teachings of the Gītā, it only shows that they both have a common, ancient parentage to which Confucianism, Stoicism, Sūfism, and so forth, can also be traced.

Love, Charity and true Renunciation (that is renunciation of desire) are the key-note of the Sermon on the Mount, and they are also the key-note of the Ethics of Vedānta. "Maintain perfect non-violence to all beings, be friendly and kind to all"[1]—this is, as the Gītā puts it, the right attitude of the aspirant to the highest Vedāntic Knowledge—the knowledge of the Self and *Brahman*. While one is on the path to such Knowledge, he must cultivate this attitude, and yet will have to "fight", as Arjuna had to fight, on to victory. When the goal is reached, this attitude becomes "habitual" and perfect in the "adept", so that he is non-violent, loving and charitable without effort or even deliberation. Though he has reached a level of perfection and wholeness in which all polarities and distinctions meet, and are exceeded, yet, his apparatus as a Centre, so long as it endures, will be one of highest ethical excellence by reason of the long and sustained ethical discipline to which it has previously submitted. The "inertia" of that moral discipline will keep that apparatus going perfectly right.

[1] Gītā, 12. 13.

We have seen what philosophical bases are provided by the Vedānta for the Ethics of the Gītā. The Self is the natural object of love; and he who sees the Self in all things, loves all as he loves the Self. The Cult of Universal Brotherhood finds, in this way, its amplest and surest foundation in the Vedāntic teaching of the Self in all things. And it is to be noted that the Self is in all *things*, and not merely in all *men*. The Vedāntist, accordingly, loves all Nature—man, animal, plant, stock and stone. Stock and stone are *not*, matter, except from the narrowly pragmatic point of view, to him: they are a form or Centre of Being-Consciousness-Joy-Play even as he is; they are not simply "elements" of *Brahman* or Self, but the *whole* of it. So long as this supreme identity has not been *proved* for him, he has not reached the goal. In fact, one of the most effective methods of his culture (*Upāsanā*) is to break the bars of the prison of convention in which not only his own Self but the Self in all things has been confined. So long as the bars of the prison are not broken, the Self-Brahman is not seen in, and as, all things, and so long, therefore, emancipation is not attained.

An Indian Sadhu who dances before a congregation of men in a "mela", addresses each as his "own Rāma", laughs as an angel may laugh and sheds rapturous tears, may not be a lunatic. The boy Dhruva, searching after his "lotus-eyed *Hari*" in the forest, would thus see Him in the hissing snake, roaring lion or tiger, in the dark shadows that inspire and instil fear, in the sunny glens of the forest that rouse and summon hope. Another God-intoxicated boy Prahlāda, when challenged by his unbelieving and persecuting father to say if his *Hari* was in that marble pillar, would say, "yes, I see Him, father".

This ethico-religious side of Vedāntism provides a field of interesting and fruitful study, and, in this last Chapter,

we have been be able to cast no more than a cursory glance. It is true that different schools of Vedāntic Thought have stressed on different aspects of ethico-religious culture: some, for instance, have laid special stress on the passing away of Ignorance and attainment of the Knowledge of the Whole and Perfect; others, while recognising this, have stressed on Devotion, Love and Service, and with the followers of these—who form a considerable number—the Christians will no doubt feel themselves in perfect accord not only in Communing spirit, but as regards most of the essential elements of worship. Then, there are others, who, combining the features of both the above Methods, will lay special stress on Intensive Action and *Yoga*. And, it should be observed, that the relations of these Methods to one another are not of separation and opposition, but of special emphasis and supplementation.

The Self as *Brahman* is in, and as, all things, but things, that is, Centres and their aptitudes and capacities, are *practically* infinitely various; so that our programme of self-culture must be framed with reference to these varying capacities, with this guarantee that each Centre, working and developing in its own level and line freely, shall reach ultimately the plane of the Supreme and Absolute Self. The Gītā, to which we have referred, exhibits in a most beautiful way, the mutual relations and essential unity of the three Methods of Action, Devotion and Knowledge,[1] each of which is called by it "Yoga"—which is their co-essence. And *Yoga* means "Union", the realising of the Whole by what is, pragmatically, a 'part.' Whether in the final state the 'part' shall absolutely lose itself in the whole (as the *Māyāvāda* appears to teach), or shall exist in, and recognise itself as existing in, the Whole (as some other Vedāntic Schools teach) may be an interesting point, but its settlement one way

[1] Karma, Bhakti, Jñāna.

or the other does not affect the general definition of *Yoga* above given.

Nor need we go into the question, often not very intelligently raised, as to whether Vedānta does not sanction a self-centred life, and one that connotes lack of power—the sterner stuff of our moral being on which Nietzsche and others laid so much stress—in the ordinary, mundane realm of existence. That some types of Vedāntic and Buddhistic Philosophy—especially as injudiciously extended and made available to the incompetent or those who are not fit to receive and profit by its teachings—have in fact tended to depreciate the humanistic and mundane values, is a statement that need not be denied. Such improper availability of the highest Truths for those who are unfit is strongly condemned by the Vedānta itself, and it is doubtless true that, in a measure, this *has* been responsible for the low efficiency of Indian life in the later eras of its history. Nevertheless, it is to be observed that humanistic virtues have not suffered to the same extent as the mundane virtues, especially those summed up by politico-economic *solvency* and *efficiency*. As regards non-violence in spirit, charity, toleration and love, the unsophisticated Indian masses (excluding a section of the mill and factory "hands", for example), have hardly their superiors in the masses of other races of the globe. But the "active" side has certainly suffered.

The same is true, more markedly and with more disastrous results, in the case of mundane and, especially, "national" virtues. There is evidence of increased inertia ("tamas") all along the line. This is precisely what ought not to follow from the premises of Vedānta. According to them, as we have seen, each Centre is an apparatus in and through which the Whole Cosmic Being-Power (as Joy-Consciousness) is *freely* operating; so that every Centre should feel that it is a Centre of unmeasured free Power, and essentially a

manifestation of unbounded Joy-Consciousness, though, pragmatically, limiting itself. It is a complete reversal of Vedānta, if a Centre feels that it is poor, weak, enslaved, diseased, starved and cheerless.

But, on the other hand, it must be borne in mind that the *current* mundane values are not necessarily the best and the most substantial. The ethics of the Gītā not only allowed but encouraged Arjuna to fight—his external foe *as well as* his internal—to victory. But suppose instead of such ethics we adopt those of the Sermon on the Mount or those preached by Lord Buddha as preparatory to *Nirvāṇa*. Will a race or nation adopting *such* ethics, absolutely unstintedly, as its practical home or international policy, have a chance in such a grabbing and mutually stabbing and robbing "common-wealth" of nations as we find our lot to live in to-day? If not, is the Sermon on the Mount to blame for that? Are we to blame Science again, because she is being *misapplied* on such a devastatingly and devilishly gigantic scale by the art of modern warfare, for instance?

A nation's practical ethics and philosophy should be such that it lives and can hold its own on their basis against any combination of hostile or disintegrating environmental forces; or, to state generally, to profit by those forces that accelerate or help its real advance, and resist those that obstruct it or turn it back or lead it astray. For this it is *not* necessary that it should always and in every case "move with the times", as the phrase is; often particularly when the disposition of world forces takes a mischievous or sinister orientation, it becomes necessary that a nation should summon enough courage and strength to *refuse* to move (so far as that may be possible) or move *in spite of* the times. Now, I think it can be claimed for the fundamental teaching of the Vedānta that, if rightly imbibed and thoroughly cultivated, it *does* confer such strength. The key-note of this gospel is Blessedness,

Fearlessness and Deathlessness,[1] and a nation living according to and up to this gospel, truly in spirit and in action, can never come to grief, or find that it has lived in vain.

In the closing paragraphs of this last chapter, I propose to refer for one moment to the Vedāntic position in regard to two matters of vital interest connected with the nature and destiny of the Self: its Freedom, and its Immortality. From the outline of the Vedāntic position that we have essayed to draw in these chapters, it would appear that freedom is not an acquired and imposed character of a Centre, but that it is intrinsic and essential to it. Not only a Centre as man, but *every Centre of whatever kind*, possesses it as its inalienable birthright. There is no possibility of "selling this birthright for a mess of pottage", or for any other thing. This freedom flows out of, and is an expression of, *Ānanda* (Joy-Consciousness) which is the essence and radix of *all* being. The *Brahman*, it is true, has measured and defined itself in, and as, each Centre, and logically, this seems to be a contradiction or negation of what the *Brahman* in itself is. But such negation can never *really* mean that it has become the negation of Joy-Play-Consciousness. It can negate itself only in, and as, the practical "ignorance" of defined and measured Centres. Such negation is, therefore, negation-in-affirmation, or conventional negation of actual, real affirmation.

It is true that Māyā-vāda speaks of the Self (*Ātman*) as being absolutely unattached, and being neither a doer nor an enjoyer. But it is clear that *this* Self is the "Pure Æther" only of which we have spoken, and it is *not* what we have called a "Centre". To the "Pure Æther", pure Being, pure Consciousness, pure Joy and pure Action can and must be attributed, but as these lack special reference and form, they are, practically *no* Being etc., especially *no* Action. This, however, is a matter of convention and definition.

[1] Ānandam, Abhayam, Amṛtatvam.

Since, again, a Centre is the Continuum-Point in a certain position (as studied in the previous chapters), its freedom is limited and conditional only with reference to the convention of its position; in itself, and apart from such pragmatic reference, a Centre is the *same* as the Continuum-Point (which is the *same* as *Brahman*), possessing, therefore, a Freedom which is, *really*, unmeasured and unlimited, that is, *absolute*. A centre commonly feels that it has but a small "holding" in the cosmic scheme, and that its right of free action is defined and limited by the rights of countless other Centres. If this were its real and final position it could, no doubt, by successful "negotiation" widen its "wall" or "fencing", but the world being illimitably wide and time endless, it could never be possessor of *all*—it could never be the Whole (*Pūrṇa*). Human progress and evolution would then be unending in the infinite involution-evolution curve.

But the moment, a Centre is able, by Knowledge, Devotion and *Yoga*, to realize its real Self (that is, the Continuum-Point), it ceases to belong as a constituent "term" to the infinite series, the unending "spiral" of evolution; it escapes from the net of cosmic determination. Salvation or liberation is *essential* to a Centre: it *is* ever absolutely free. And it can realize this *at this very moment*, through "Grace", Knowledge and *Yoga* (that is, Union). The path of liberation is a laboriously long and arduous spiral ascent, so long as a Centre is in the scheme of convention which defines it as a finite Centre; but it is direct, immediate and complete, the moment it realizes itself as not defined and restricted by *any* scheme of convention whatever.

Not only man, but *every* kind of being, possesses this essential nature and carries the possibility of this supreme destiny, "more or less" according to chosen frames of convention, but absolutely and perfectly in itself. In fact, every form of existence is thus an End in itself, a Value, and

Power to realize that Value, in itself. There is *nothing* which is merely a means, a tool, an instrument or an occasion. The world is not merely a scene or a theatre: every atom of it is a Self—a Centre of Unmeasured Joy-Play-Consciousness.

The question of immortality finds also its most logical and reassuring answer from the fundamental premises of Vedānta. Not only is every Centre immortal in, and as, its "core" (before explained), but it is relatively immortal in what we have called its "sheaths". The sheaths vary, no doubt, according to *Karma*, but these *in proportion to their fineness* and *essential affinity to the core*, also substantially persist, as, for instance, in the grosser plane, the "body" persists, though every moment its constituent tissues are undergoing metabolic changes. The finer and more directly allied (that is, those expressive of Being-Consciousness-Joy-Play more fully and patently) sheaths endure and survive the death of the physical body. A Centre *must* continue as a Centre, with appropriately defined and constituted "sheaths", so long as its Journey's End as a Centre is not attained. It passes through many "births", and the characters and positions of these in the cosmic curve are not, in fact, determined by "external" agencies and forces, but by its own *Karma*, done now or before.

SUMMARY

THERE is a sense in which, it may be thought, an apology is needed for introducing Vedāntism to the world of to-day. Vedāntism is generally believed to be a theory of life and existence which has tended to undermine the values of our ordinary worldly experience, and thereby to weaken the props on which our moral, social, and other institutions rest. It has been commonly understood to be a doctrine that reduces the world to an illusion, life to an empty dream, human personality (connoting freedom of action) to a deception, and the distinctions of good and bad, beautiful and ugly, and so forth, to mere futilities and conventions. If there is substantial truth in this charge so commonly brought against Vedāntism—which has not unoften been held responsible for weakening of India's grip on the realities of life—, then an apology is certainly needed for introducing such a doctrine and cult of "practical inefficiency and failure" to the world to-day. This question of value (Prayojana) is a vital question in regard to any actual or proposed human discipline, practical or intellectual. At the very outset, therefore, Vedāntism is called upon to vindicate itself as a discipline which has some sort of real value. If it fails to do so, it becomes a discipline of no value; and may possibly be regarded as one of the unhealthy tumours growing on the brain of humanity, which the sooner it could be operated away the better.

VEDĀNTA NOT A DEAD THOUGHT

But whatever practical value Vedāntism does or does not possess, the fact cannot be gainsaid that it is not a dead, but a still living thought in Indian life (or in the life of the world if we take Vedāntism in a broad sense), for the matter of that. One cannot, therefore, afford to treat it as one would treat an archæological exhibit or palæontological fossil.

There is another sense in which no apology is needed for Vedāntism. Apart from the fact that it is to-day one of the most widely known and discussed systems of Indian thought, both here and abroad (though this does not necessarily mean that it is also the best understood and appreciated system), we have this significant fact becoming increasingly significant, with the progress of time, *viz.*, that many of the deeper currents in the realms of Science and Philosophy are now seeming to converge to a position that is essentially similar to the position of Brahmavāda in the Upaniṣads. Such progressively indicated agreement of ancient thought with the suggestions and implications, if not the actual findings, of modern thought is, of course, no absolute proof that either is true or valuable; but it at least raises the probability of their being so. The probative value of each is enhanced, if both pursuing apparently different avenues of approach, ultimately meet at a common point.

Indications of Unity

The clear indications of unity are becoming clearer day by day as enquiry is proceeding apace in Physical Science. The "units" of physical matter are no longer the "hard," separate atoms, but units of electric charge, positive and negative; so that the different "elements" differ not in substance of stuff but in constitution or as regards "atomic number". The "material" of matter is thus one. The current dynamical view of matter has further tended to reduce the "mass" of matter to purely electro-magnetic mass, and thereby, narrowed the gulf between matter and energy. This, in one sense, is movement towards the dematerialization of matter. The continuum of Æther of which the atom or rather the prime atom is still believed by many to be a strained condition, has become a "quasi" material medium itself which cannot be conceived after any mechanical model at all (perfect fluid, etc.), but whose properties may be stated in terms of certain differential equations. The Relativity Theory has postulated a still more undefinable frame-work for the universe—the four-dimensional continuum of points (point-events, intervals, tensors, and so on). And so,

though some kind of continuum (whether the Æther or the four-dimensional continuum of points) is strongly indicated in physical speculation, we have to start in the last resort, with what Bertrand Russell calls "an apparatus of the undefined". Hence the victory of fundamental unity and continuity is achieved in science at the cost of definability and measurability. As Prof. Eddington has remarked, the fundamental postulates of physical speculation are both undefinable and unmeasurable; then come certain entities (electricity, etc.) which are undefinable but measurable; lastly come the objects of experience both definable and measurable. Fundamental unity and continuity coupled with fundamental undefinability and unmeasurability are therefore, the plainest indications of current physical speculations.

Similar are the indications in biological science. In the first place, the two sister kingdoms of plants and animals are being more and more closely assimilated to each other, both as regards structure and functioning, with the progress of biology. In this connection the author has referred to the researches of Sir J. C. Bose, and discussed a recent address by him in which he demonstrated by means of the Electric Probe and Resonance Recorder the existence of a heart-mechanism in the plant-body. This light, lighting up as it does the hitherto unknown and unsuspected links of natural affinity and unity and continuity in the living world, also shows the deeper depths of the dark profundities of cellular life and existence. The highly specialized activities of the micro-organisms hardly distinguishable under the microscope; their "hobbies" or eccentricities; the mysterious affinities, and selections evident in the impregnation of the ovum and consequent fusion of the nuclei of the male and female elements: and many similar facts, while pointing to unity and continuity in the fundamental plan of Nature, also point to an "apparatus of undefinability" given in it—which, as Science progresses, recedes like the chased horizon, but never vanishes. Secondly, the Law of Evolution showing the community of the living species and their continuity of descent is also now an admitted fact; but the actual machinery—"modus operandi"—of evolution is to-day as keenly disputed and debated as ever before, and suggests, deep down

in the constitution of Nature, something which is fundamentally not amenable to definition and measurement.

Towards Monism

Then, lastly, as regards the "origin" of life, scientific thought has indeed been strongly leaning towards a monistic explanation (*e.g.*, the colloidal theory, and so forth); but here, too, unity and continuity, are purchased at the cost of definability and measurability; for, even if life "spontaneously" originates from matter, life is not thereby "materialized"; since matter itself, in its last analysis, has become undefined and unmeasured. The idea of a "cell-soul" or even an "atom-soul" cannot be lightly dismissed as a pure myth. Matter on one side, and life and soul on the other, may ultimately meet and coincide. Science confirms rather than shakes such a hope and belief. But by such fusion, though unity is achieved, the vaunted definability and measurability of matter ultimately vanishes. The discovery of the hormone-secreting glands, to take one characteristic example, has shown that the mysteries of cell-metabolism, in the extent and depth of its structural and functional consequences, are truly profound.

Glancing lastly at the realm of Psychology—especially the interesting later development of it called Experimental Psychology and Abnormal Psychology—it is easy to perceive that whilst there is, doubtless, a community of mental life in the animal kingdom (possibly also the vegetable) including man, the consciousness of different men probably form parts of a common, cosmic consciousness (or sub-consciousness); that individual souls are bargaining with one another in a universal "Over-Soul" medium.

Hypothesis of a "Neutral Being"

Unity and continuity are unmistakably indicated; but the fundamental mystery has also become deeper. The relation of the cosmic psychic stuff to individual stuff, the relation of matter to mind—have indeed tended to become a monistic relation, but along with

this monistic perception in science has grown a perception of fundamental undefinability and unmeasurability. Dualistic, Materialistic, Parallelistic, and Idealistic versions are all found to be inadequate. A " Neutral Being " with an " apparatus " of the undefinable and unmeasurable given in it, which, in the words of Bertrand Russell, makes " matter less material and mind less mental," is indicated at the root. It need not, however, be the " Thing-in-itself" of the Unknowabilist. It may be Being-experience whole or " Fact ". This is the fundamental " Brahman " of Vedānta.

The Nature of Brahman

That the plainest indication of modern scientific tendencies as to the fundamentals of the Universe is increasingly in accord with the deepest teachings of the Vedānta, can be shown by a consideration of the oldest texts relating to the nature of " Brahman ". It is true that in the *Ṛgveda*, particularly in those portions of it which modern research regards as the " older strata ", the term " Brahman " is commonly used to mean " sacred lore ", " holy inspiration ", and the like; but the fundamental idea of Brahman (as the continuum of Being-Energy, undefinable and unmeasurable as a whole, which sustains all finite forms of being and out of which all forms spring) runs through the literature of the Vedas as " Aditi " (for example) in the *Ṛgveda*, and as " Skambha " (for example) in the *Atharva-veda*. The latter, as even a cursory glance at the Skambha-Sūkta (10-7) will show, is on the face of it a Brahman-conception with which the Upaniṣads have made us familiar. As regards the former, " Aditi ", the implications seem to be equally clear. Max Müller regarded it as one of the oldest of Āryan concepts, and though in the Vedas, ' Aditi ' has been made to appear in a variety of rôles, it is undeniable (as Wallis, Oldenberg, Macdonell and others have recognized) that the underlying idea of " Aditi " is " freedom from bonds or limitations ". Orthodox commentators (such as Sāyaṇa) also take it to mean " the Undivided, the Continuum ". We may take it, therefore, as a generally admitted position that Aditi in the Vedas means the undefined and undifferentiated Basis of all polarities and

differentiations in the universe. *The Bṛhadāraṇyaka Upaniṣad* makes it the consumer (from root " ad ") of all things—that is, the ultimate ground in which all differentiations (symbolically " annam " or " food ") are swallowed up. Aditi is the parent of all the " gods ", and, particularly of " Dyauh " and " Pṛthivī ". These latter have commonly been grossly understood to mean " heaven " and " earth " respectively. But a close examination of the texts (not discarding the light thrown upon them by " later " Brāhmaṇas, Āraṇyakas and Upaniṣads) will show that these, like " Aditi " itself, are universal concepts of which Heaven and Earth, amongst others are particular representations. Consistently with this view " Dyauh " and "Pṛthivī" represent not only heaven and earth, but any two ' poles ' of being which have differentiated themselves from each other; they may be subjective or objective, great or small. For instance, two unit charges of electricity, positive and negative may be called " Dyauh " and " Prīthivī ", and the interval between them " Antarīksha ". The " interval " between two " point-events " in the Relativity Theory may also be regarded as " Antarīkṣa ". The two " aranis " (pieces of wood) which by friction produce fire may be similarly described as also " Ūrvaśī " and " Purūravas " who symbolize the two " aranis ". Briefly, " Aditi ", " Dyauh ", " Pṛthivī " etc. as conceived in the Vedic literature, should not be rigidly identified with this natural object or phenomenon or that, but should be regarded as universal concepts having particular representations. This is a meaning not read " into the Vedas, but one that can be found in it and got " out " of it. Now, the basic conception of Aditi is the basic conception of Brahman. Other well known Sūktas in the *Ṛg-veda* and *Atharva-veda* show that the nucleus or kernel round which ancient theosophic and theogonic ideas rested or grew is the idea of a Continuum of Being-Energy, undefined and unmeasurable in itself—which is the idea of " Aditi ", and also the equally ancient idea of " Varuṇa ".

Brahman is Alogical

The Upaniṣads in many places, applying contradictory epithets (as does the *Kena Upaniṣad*, for instance) to Brahman, convey to us

the deepest import of ancient Brahmavāda, *viz.* that Brahman is alogical—a substratum of Being-Energy too immense (Bhūman) to be cast into any of the "moulds" (categories) of logical thinking. This is also the essential idea underlying the teaching of "Bhūman" in the seventh chapter of *Chāndogya Upaniṣad*, where the polarities of subject-object, seer-seen etc. are negatived with regard to the Supreme-Being-Experience.

The Upaniṣads make another feature clear as regards the Alogical Continuum of Being-Energy, *viz.* that it is Experience. *Bṛhadāraṇyaka* calls Brahman "Sākṣāt aparokṣa"—immediate experience; *Kena Upaniṣad* says that Brahman is "pratibodha-viśavam"—intuitively given in every fact of experience as its veiled (that is, unrecognized) background.

Such immediacy of Brahman together with its fundamental alogicality and unmeasurability makes it a "Patent Wonder" instead of a hidden wonder—an "inscrutable Power", an insoluble "Riddle" or "Enigma" (as Herbert Spencer, Ernst Haeckel, E. du Lois Reymond in the last centuries would regard it respectively). In other words, ancient Brahmavāda is in advance of scientific monism of to day in that it has found Brahman beyond and behind limited and pragmatic experiences, but not beyond Experience-Whole.

The Kernel of Brahma-vāda

Now, this "kernel" of Brahma-vāda is more ancient than it is generally thought to be. Whatever may be the case with the special growths or "refinements" of the kernel, the kernel itself is discoverable in all the strata of human culture, and can be found in all the ages and epochs of the long history of human evolution of which we possess archæological or historical record. It seems to be a "home-typal" idea which, whether in an intuitive or in a reflective way, has underlain the whole mass of human beliefs and practices since the very first appearance of the Eoanthropus ("Dawn man") and Homo Sapiens.

In order to perceive the universal pervasiveness of the Brahman-Experience in the human race, one must not take it in a restricted

sense to mean any of its actually formulated types such as the Māyāvāda of Śaṅkara or the Absolute Monism of the Greek Eleatics. Brahman-Experience may form part of the structure of the intuitive beliefs (almost sub-conscious) of humanity, or part of the structure of its reflected thought. This latter may be either formulated (that is reduced to system), or unformulated. The former, again, may be of two types: (1) practically or experimentally formulated (*e.g.*, Kepler's well-known laws of planetary motion had been practically formulated by him: and, later, they were theoretically formulated by Newton with the help of his laws of Motion and Gravitation; similarly, in the Upaniṣads we read stories of aspirant disciples who were "gradually" led to realize the nature of Brahman practically through such tentative and leading conceptions as Brahman is "food", Brahman is "life", Brahman is "mind", and so on until the Pūrṇa or Whole itself was reached.) Or (2) it may be theoretically formulated as by Bādarāyaṇa in his Brahma-Sūtra, and by the various schools of its interpreters. And since the essence of Brahmavāda is the common heritage of man, we may expect to find its unformulated and formulated types that are not merely Indian, but that are extra-Indian also; which are not merely historic, but are "prehistoric" and "proto-historic" also.

As regards the anthropological and ethnological aspects of the question, ever since the time of Rousseau's "noble savage," scientific opinion as regards the actual state of culture of the modern savage as well as of the "ancient hunters" has been sharply divided. Appreciative and depreciative valuations are still both current; but, broadly speaking an outlook, more generous and sympathetic than it used to be, has been steadily opening up before our eyes.

The Forbears of Man

A simple derivation of the existing human races (particularly the more advanced races) in an unbroken direct and steadily progressive line from some "missing" type of the anthropoid ape in the late tertiary or pleistocene age is no longer found to be possible. There can probably be no doubt about "the common

stem" and the fact of evolutionary descent itself of man: but the tendency of modern anthropological thought (as represented by Sir Arthur Keith and others) is to regard the Pithecanthropus erectus of Java, the Heidelberg man, Piltdown man, Neanderthal man as not in our direct ancestral line, but as collateral branches: and as far as our imagination stretches back into antiquity, the picture presented is not one of simplicity but "a complex of ancient humanity" about whose ethnological characters it is impossible to make any definite assertions.

Coming down to the Cro-magnon race in Europe and Aurignacian culture of which we now possess some archæological data, it can only be a travesty of the truth to maintain that they were "brutes," devoid of the rudiments of culture. Their artefacts and other archæological signs point unmistakably to magic occupying the centere of their religious beliefs and practices. And what is true of them is true of other "lower cultures," ancient and modern, elsewhere on the globe.

Magic as Primitive Science

The underlying idea of magic (however intuitive, unformulated it may be at times) is now better appreciated. The old, easy rule, *viz.* the more abstract and universal an idea, the later is its development in cultural history—must now be revised and reunderstood. The rule may hold good as regards reflective and formulated ideas but not so far as essential intuitions of man are concerned. Now, in magic, the palæolithic and prepalæolithic man, as also the modern savage must have an essential intuition (that is, probably neither reflective nor formulated) of a Universal Dynamism: undefined and unmeasured, by which man and every other being is encompassed and to which it is possible (so the "savage" believes) to establish connexion by magical rites (such as the rain-dance), and thereby bring about the desired results. It is, therefore, a sort of "primitive science" and its basis is an *intuition*, very lively and exacting though inarticulate of an undefined Universal Being-Energy. This is a kind of Brahman-Experience.

The author in conclusion has shown this by alluding to such "primitive" conceptions of an indefinite Being-Power as the "mana" of the Polynesians, "orenda" etc. of some American tribes. "Ahai" of the Zunis of Mexico and so on. Some may still doubt the "breadth" of these notions; others following Tylor, may call them pantheistic animisms. But it seems likely that in all these we at least touch the very kernel of ancient Brahma-vāda.

Brahman Undefinable

Brahman is undefinable and immeasurable Being. Since evidence in the realm of ordinary experience can relate to what is definable and measurable, Brahman is beyond the ordinary kinds of evidence such as sense-perception and inference. Sense-perception can give us what has definite "form" and inference is possible from data which gives us definite marks or "signs". But Brahman is without a definable form ("Rūpa") and without definite signs ("Linga"). This remains true whether we take Brahman as Pure undifferentiated Being-Consciousness-Bliss, or take it as an infinite richness of powers and qualities and manifestations.

Both Immanent and Transcendent

But as the Whole and Unmeasured Brahman can neither be excluded from the ordinary experiences which necessarily limit and measure, It is "in" them, and yet "exceeds" them. It exceeds the universe itself of myriad forms "by the measure of ten fingers"—as the famous Puruṣa Sūkta in the Ṛg and Atharva Vedas puts it in cryptic language. The experiences of the amœba, as also those of a Śaṅkara and a Kant are, in reality, Brahman experiences; though, in the "conventional universe" these represent different points of view and "apparatus" for making "cross-sections" of the Whole.

The Inherent Imperfections of Induction

Sense-experience and inference based thereupon have their inherent limitations. The Inductive Principle, as Bertrand Russell

and others have shown, can establish only a greater or less degree of probability; and though repetition, non-occurrence of exceptions, and so forth, may make the probability in a given case approach very near to certainty (as for example—the Sun will rise to-morrow), a residual margin of uncertainty and doubt does remain in every case. In this connexion the lecturer discussed at some length the apparatus of logical proof (Pramāṇa) which has been developed and perfected with such consummate skill by the logicians, and particularly the neo-logicians of India. Examining the apparatus of inference ("Vyāpti, Hetvābhāsa" etc.) as developed especially in Mithila and Bengal, the lecturer observed that in "theory" it may be deemed as perfect as any machinery developed by imperfect human intelligence can expect to be and it is really no detraction from the glory of the "informing" genius of Mithila and Bengal that in practical application the apparatus does not work as easily and smoothly as it does in the realm of theory and pure symbols. "All" abstract principles and canons, whether in mathematics or in logic, are liable to feel "awkward" in the crude, common world of sense-data. The author has shown in particular by means of diagrams and symbols how the definition of "Vyāpti" or invariable relation as given in neologic has been perfected to reduce to the vanishing point the possibility of fallacies creeping into inferences drawn on the strength of "Vyāpti" so defined. But though the deductive fallacies are thus well kept out, one can never be so sure of the inductive fallacies the moment one comes down from the realm of pure symbols to that of the facts of concrete experience. When we substitute "smoke" and "fire" for B and A in the canon of "Vyāpti", we are admittedly on insecure ground. Just as smokeless fire is known and was contemplated by the neo-logicians, so fireless smoke may some day be known—smoke may, possibly, be produced by an agency other than fire. This, however, is a contingency which threatens "all" inferences as to facts of experience.

Nevertheless it is worth our while to develop a 'theory' of the conditions of valid inference, or other forms of right knowledge for the matter of that. In mathemetical physics, for instance, theories are developed, which though they may not "completely"

sum up and apply to the routine of experience, are yet valuable as "forms" or "standards" applicable to "ideal" cases.

The Contribution of Navya-Nyāya

The service rendered to the cause of science and philosophy by the Neologic of Mithila and Bengal must be deemed valuable in this sense. What is now required is to develop the applied and illustrative side of this logic in view of the wide extension of knowledge from observation and experiment practically effected in every sphere. The apparatus of neologic has proved very helpful to later schoolmen in enunciating and formulating the basic doctrines of their schools with scientific precision—a degree of precision which cannot fail to evoke admiration in the minds of all serious students. The Upaniṣads are, of course, the unfathomed mine of Vedāntic lore but the language there is often cryptic and ambiguous. Even the Brahma Sūtras, formulating the doctrine, has in practice, proved a starting point of many divergent lines of interpretation. The neologic technique of later Vedānta Mīmāṁsa and other systems, has been helpful in this that it has clearly defined and stated the position in each case; and though such defining is no solving of the problems involved, it is at least a first step made towards it. That technique the student should, therefore, master.

Negative Results

In view of the essentially indefinable character of Brahman, the argumentative part of Vedānta has been productive chiefly of a negative result. It has served to demolish the pretensions of those methods that have proceeded to define and measure, overtly or otherwise, Brahman itself.

Pragmatic Method Inadequate

Ordinary perception, too, has its necessary limitations. Each perceiving "Centre"—whether an amœba or a man—is a special

kind of apparatus for making a cross-section of the Whole; and since the given apparatus are of different kinds, the cross-sections are necessarily different also. It is not easy, therefore, to determine truth or validity by the test of "correspondence" between the Whole and any one "cross-section". Though different cross-sections of the Whole made by us may have a common element which we practically agree to call our "objective realm" that realm gives us nothing as the guarantor of truth as such. Evidently, truth must not be conceived as something rigid and unmoved, but as a developing series or grades of values. Our lay experiences, expert experiences, those of the animals and possibly also of plants, each has its place in this "ladder" of values, higher or lower. The question naturally arises: What is the highest rung or level of this ladder of values—or what is Truth from the point of view of the Whole and Unconditioned?

It is clear that the discovery of such Truth ("Satyam") is the "discovery" of Brahman. For this discovery the pragmatic methods are insufficient.

Śruti and Vlda

The nature of *Śruti, Veda* or "Revelation" has not, commonly, been correctly understood. The former term comes from a root meaning "to hear," and the latter from a root meaning "to know". The former indicates that the *Veda* is a body of knowledge which is *communicated.* Knowledge must be taken in an extended sense to mean Experience. This may be either perfect or imperfect, direct or indirect; *Veda,* in the ultimate sense, means Perfect Direct Experience. It is the same as the Experience of the Perfect Continuum-Point or *Iśvara.* Evidently, in *this* Experience, the collateral streams of Name, Thought and Thing which appear to flow separately in us, unite: Perfect Experience is the plane of perfect "Natural Name" (*Śabdā*), perfect Thought (*Pratyaya*) and perfect Thing (*Artha*).

The "descent" and "reproduction" (so far as it may be possible) of this Perfect *Veda* in the "Centres" below the Supreme

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Centre, is *Śruti* or Revelation. In such descent, the streams that unite in the Perfect plane, divide; so that, to us the Word of *Śruti*, its Meaning, and its Object, are different, and separately realizable. Again, in such descent, the Perfect Experience becomes conditioned and limited, more or less, by the capacity of the given Centre.

The reproduction of the *Veda* in a given Centre may be common or uncommon. The former is the "cross-section" which that Centre makes, in the process of its ordinary, current experiences, from the Perfect Experience. In this sense and aspect, the commonest experience of a Centre is *Veda*, is "revelation".

But the uncommon type is the more important. This uncommon experience (including *Śabda*, *Artha* and *Pratyaya*) may be "acquired" or "received" or "communicated". Thus a scientific observer or a *Yogin* may directly acquire a body of experiences, whereas a body of experiences may be "communicated" to him. This latter we may proceed to directly acquire, and personally to verify. He either is or is not able to so verify it. If he is, *Śruti* (Revelation) ceases to be *mere* revelation to him; it becomes *also* his own experience (*Pratyakṣa*). If he is not, it is *Śruti* to him, not *Pratyakṣa*. The extent to which he is able to make the "Revealed word" his own experience varies. Commonly, a gulf remains between the two.

Perfect Word, Thought and Thing is not capable of being communicated *perfectly* to "imperfect" Centres. So that, a Centre not only is not, commonly, able to verify the "Word" completely, but cannot, also, "receive" it perfectly. Commonly, there is a defect, greater or less, in the "reception" of the "Word" (Experience being communicated) as well as in its personal verification. A Centre is called a "Seer" (*Ṛṣi*), when, according to chosen standard of correctness, the defect becomes practically negligible in either case.

Śruti, therefore, is not the personal (and uncommon) experience of the *Ṛṣi*, though he may, and as a matter of fact does, essay to verify it either completely or in part. In the former case, *Śruti* becomes his own *Pratyakṣa*, as it is the *Pratyakṣa* of the Supreme Centre. In the latter case, it remains *Śruti* to the extent he is not able to verify it.

Nevertheless, the *Śruti* as the Standard or Classics of Experience (involving Word, Thought and Fact), is transmitted through a line of "receivers" and "transmitters". The receivers and transmitters, as we have seen, are also each a verifier—to the extent of his capacity. The line starts from the plane of the Supreme Centre, and comes down to the plane of ordinary Centres such as we are. In the case of every Centre, be he a *Ṛṣi* or an ordinary man, the line of communicated Word and Knowledge must be distinguished from that of personal experience: the two keep apart; they completely meet in the Supreme Plane, or in the experience of the *Ṛṣi* who may attain to the Supreme Plane.

The line of communication as also that of personal verification in any plane is conditioned by the factors of V and T (Veiling and Treating), before explained, incidental to that plane. These, as has been elsewhere explained, are the true meanings of *Madhu* and *Kaitabha*—the "demons" who wanted to kill the Lord of the Created beings (Prajāpati) in His essay to create the world out of *Veda* or Divine Word and Experience—often figuring in the Paurānic "myths". V and T must be reduced as near as possible to zero in order that *Veda* in the Highest Plane may be *truly* communicated and received in the lower planes; and this is also the condition that a Centre in the lower planes may correctly and completely verify in, and by, his personal experience the received Word and Knowledge.

This *theory* of *Śruti* is, as we can easily perceive, based on the general premises that we have sought to establish in the main body of these lectures relating to the nature of the Continuum Point and the Centres.

We may proceed either from the general premises, or from the natural imperfections of our senses and other experiences. The consideration of these latter—progressively rectified in the experiences of the "expert", whether scientist or *yogin*—suggests an ideal Limit or Standard which is the *Veda* in the Supreme Plane. It also suggests a descent of that Standard Experience (Word) to the planes of the subordinate Centres, running as the "Major Axis" from which the personal experiences of those Centres start and diverge. Certain Centres are able to keep very near to the Line of the "Major Axis" and they have been called *Ṛṣis*.

This is, briefly, the *theory* of *Śruti* or *Veda*. And it is a noteworthy fact that all ancient religions and cultures have accepted this theory. The general principle underlying this theory ought not to be allowed to be obscured by the fact that different cultures have claimed different Revelations as being the true one. This latter is a question of fact. And if we bear in mind the implications of the general principle here enunciated, we shall, probably, discover a clue leading to a working reconciliation of these apparently mutually opposed claims. Thus, inspite of the discrepancies and contradictions, it may be possible to discover substantial agreement and a substratum of Truth in *all* the Revelations. In fact, Revelation is a perennial fact; and its apprehension and appreciation are both conditioned by the V and T incidental to the planes where it may be " received ". Every Centre and plane is, to some extent, a " coherer " of the " radio waves " of the Divine Message—the Perfect word.

The Vedāntic Texts very prominently put this aspect of the matter before us. They tell us—(1) *Veda* is *Brahman*; (2) all Centres share in It according to their capacity; (3) apart from the personal experiences of the Centres, there has been a " descent ", through a line of especially competent Centres called *Ṛṣis* of the *Veda* to our planes, representing both *Vidyā* (knowledge of *Kṣara* and *Akṣara*) and Word; (4) any Centre can *prove* It by his personal experience; (5) a Centre absolutely *completely* proving It becomes *Brahman* and is freed from " bondage ".

In the Vedānta, the *Śruti* has often been referred to as *Pratyakṣa*, and we now see what is meant by it. All interpreters agree in regarding *this* as the final authority or evidence, especially as regards objects that lie beyond, or are unappreciated in, ordinary experience. Reasoning, deductive or inductive, based upon ordinary sense-data *may* point to truth as regards such objects, but it is, from the nature of the case, inconclusive.

One of the most vitally interesting problems is, undoubtedly, the problem of life and death, and the destiny of the soul. Philosophy, ever since its birth, has addressed itself to this problem, but it cannot be claimed on its behalf that it has ever brought us to a position from where we can say that the solution is in sight at last.

Scepticism about, as well as belief, in the immortality of the Soul both seem to be equally ancient attitudes of the human mind, and both have lived to this day.

The position of the Vedānta—which is, substantially also the position of other ancient cultures, high or "low" is typically represented in the ancient wisdom—transmitted through a line of "Seers", who were also, according to their varying capacity, experimenters and verifiers,—called the Pañchāgni-Vidyā" inculcated especially in the *Bṛhadāraṇyaka* and *Chāndogya Upaniṣads*. The two *post mortem* "Paths" ("dark" and "bright") showing the circuit described by a *Jīva* after death are the theme of many other Revealed Texts, and we have an authoritative pronouncement on them in the eighth chapter of the Gītā also. The Egyptian *Book of the Dead*, and similar ancient Texts in other cultures of antiquity show that the doctrine was part of the ancient structure of human belief with variants that we might regard as inessential. This belief lay at the root, and inspired the immemorial institution of Magic also.

The researches of the Neo-Spiritualists of to-day, apart from the fact, still disputed, that they are collecting fresh evidence and throwing light on the old (as regards the main features of the survival phenomena), is, at least, proof that the ancient belief referred to is not dead, and is today sufficiently insistent to engage the serious attention and investigation of some of the best intellects of the age.

The belief, in its essence, is sanctioned by the authority of *Śruti*; but a Centre can also essay to verify it, to a greater or less extent, by experiment. *Śruti* itself lays down the method whereby a successful experiment can be instituted by the investigator. In *Yoga* (See *Yoga Sūtras*, Vibhūti Pāda) the method is defined in precise terms, as an actual *mode* of experimentation may, for instance, be described in a scientific treatise. The famous boy, Nachiketās, in the *Kaṭha Upaniṣad*, the *muni* Jaigiśavya, Ṛṣi Vāmadeva, and others mentioned in the Purāṇas, are some of the classical experimenters. There, in fact, have been "mystic" experimenters in all ages, and, in the proceedings of the Psychic and Spiritualistic Research we are,—one may venture to think—having an endorsement of the labours and results of the bygone times.

The revised and "enlightened" conception of the "Centre" to which Philosophy, moving in the wake of Science is steadily coming, shows that the *rational* basis of the ancient human belief may not, after all, be so flimsy as the narrow "bigotry" of the last century's "rationalism" generally thought it to be. We have attempted to present a view of the Centre which, we think, shows that immortality, like freedom, is its "birth right", since, according to that view, it *is really* the Continuum-Point, and as such *continues to be and become.*

Since the Continuum of Being-Power *involves* Itself as the Point and *evolves* as Centres in various planes and positions to become the Continuum again, every Centre represents an attitude of the Brahman's Will-to-be-and-become, and consequently, it cannot cease to be so long as the "motive" or "Will" (*Kāma* or *Saṅkalpa*) at the root of it persists; that is, so long as the End or Purpose involved in its being is not realized. We have seen in the main body of the Lectures under what circumstances and by what methods the End, *viz.*, union with *Brahman*, is, or may be, realized by a Centre.

The Centre itself is an expression and apparatus of the "Will"; so that it is, essentially free, and does *Karma*. By *Karma* it is remaking its apparatus and redistributing itself in the cosmic scheme of "configuration". This means that a Centre is what it is by its *Karma*, and the infinite curve of its life is described by its *Karma*.

Its *Karmic* conditions determine whether the "seed" of a Centre must be born into a certain "type" of being (living or non-living), continue in it, or leave it, and be born into another. So long as it enters into and remains in a given "type", it exhibits the typal characters defined by the laws of heredity; but it still bears a potency of being-efficiency vaster than that of the given "type"—one in which the potentialities of many other "types" lie implicit; and, above all, the power to choose by *free act* whether it shall continue in that type or exchange it for another—higher or lower. This power may be unmanifest in certain "types" of Centres, but it ever is; since, the Centre is a particular expression and apparatus of Unmeasured *Ānanda* and *Līlā* which *Brahman* is.

—*The Bengalee*, December 1927.

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